

Thr Thr Thr Lys Ala Pro Ser Val Lys Pro Lys Val Lys Gln Pro Lys
 305 310 315 320
 Val Lys Ala Glu Pro Pro Pro Lys Lys Arg Lys Lys Trp Lys Glu Glu
 325 330 335
 Phe Ser Ser Ser Gln Ser Asp Ser Ser Pro Glu Ile His Thr Ser Ser
 340 345 350
 Ser Asp Asp Glu Glu Phe Glu Pro Pro Ala Pro Phe Val Thr Arg Phe
 355 360 365
 Leu Asn Thr Arg Ala Met Lys Glu Thr Phe Lys Ser Tyr Met Glu Leu
 370 375 380
 Leu Val Ser Ile Ala Leu Asp Pro Asp Thr Met Gln Ala Leu Glu Lys
 385 390 395 400
 Ser Asn Asp Glu Leu Leu Leu Pro His Met Lys Lys Ile Asp Gly Met
 405 410 415
 Leu Asn Asp Asn Arg Lys Arg Leu Leu Leu Asn Leu His Leu Asp Gln
 420 425 430
 Ser Phe Lys Asn Ala Leu Glu Ser Phe Pro Glu Leu Thr Ile Ile Thr
 435 440 445
 Arg Asp Ser Lys Ala Lys Ser Gly Gly Thr Ala Ile Ser Lys Ile Lys
 450 455 460
 Met Asn Gly Lys Ala Tyr Asn Lys Lys Thr Leu Arg Thr Ser Lys Thr
 465 470 475 480
 Thr Thr Lys Ser Ala Gln Glu Phe Ala Val Asp Pro Glu Lys Ile Gln
 485 490 495
 Leu Tyr Ser Leu Tyr His Ser Leu His His Tyr Lys Tyr His Val Tyr
 500 505 510
 Leu Ile Cys Lys Asp Glu Ile Ser Ser Val Gln Lys Lys Asn Glu Asp
 515 520 525
 Leu Gly Gln Glu Glu Ile Val Gln Leu Cys Met Lys Asn Val Lys Trp
 530 535 540
 Val Glu Asp Leu Phe Glu Lys Phe Gly Glu Leu Leu Asn His Val Gln
 545 550 555 560
 Gln Lys Cys Ser

<210> 3793

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3793

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Met Arg Glu Leu Arg His Arg Ala Arg Pro Ser Gly Phe Asn Arg Trp
  1             5             10             15
Met Gly Ala Ala Ser Gln Ser Pro Leu Ser Ser Ala Ser Pro Ser Pro
          20             25             30
Gly His Thr Pro Ala Pro Thr Thr Ser Pro Thr Gly Tyr Arg Ala Glu
      35             40             45
Asp Pro Pro Ala Gly Arg Ala Ala Gln Arg Pro Gln His Thr His Pro
      50             55             60
Thr Leu Gln Gly Leu Thr Leu Pro Ala Gln Leu Asn Ala Thr Ser Ser
      65             70             75             80
Leu Lys Leu Ser Pro Ser Pro Pro Pro Thr Arg Ala Ala Ser Gly Pro
          85             90             95
Arg Thr Val Pro Gly Gly Ala Pro Arg Gln Asp Gln Thr Tyr Pro Ser
      100             105             110
Ser Lys Ser Pro Ser Leu Leu Thr Ala Gln Met Leu Pro Gly His
      115             120             125

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<210> 3794

<211> 711

<212> PRT

<213> Homo sapiens

<400> 3794

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Met Ser Ser Val Gln Ser Gln Gln Glu Gln Leu Ser Gln Ser Asp Pro
  1             5             10             15
Ser Pro Ser Pro Asn Ser Cys Ser Ser Phe Glu Leu Ile Asp Met Asp
          20             25             30
Ala Gly Ser Leu Tyr Glu Pro Val Ser Pro His Trp Phe Tyr Cys Lys
      35             40             45

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Ile Ile Asp Ser Lys Glu Thr Trp Ile Pro Phe Asn Ser Glu Asp Ser
 50 55 60
 Gln Gln Leu Glu Glu Ala Tyr Ser Ser Gly Lys Gly Cys Asn Gly Arg
 65 70 75 80
 Val Val Pro Thr Asp Gly Gly Arg Tyr Asp Val His Leu Gly Glu Arg
 85 90 95
 Met Arg Tyr Ala Val Tyr Trp Asp Glu Leu Ala Ser Glu Val Arg Arg
 100 105 110
 Cys Thr Trp Phe Tyr Lys Gly Asp Lys Asp Asn Lys Tyr Val Pro Tyr
 115 120 125
 Ser Glu Ser Phe Ser Gln Val Leu Glu Glu Thr Tyr Met Leu Ala Val
 130 135 140
 Thr Leu Asp Glu Trp Lys Lys Lys Leu Glu Ser Pro Asn Arg Glu Ile
 145 150 155 160
 Ile Ile Leu His Asn Pro Lys Leu Met Val His Tyr Gln Pro Val Ala
 165 170 175
 Gly Ser Asp Asp Trp Gly Ser Thr Pro Thr Glu Gln Gly Arg Pro Arg
 180 185 190
 Thr Val Lys Arg Gly Val Glu Asn Ile Ser Val Asp Ile His Cys Gly
 195 200 205
 Glu Pro Leu Gln Ile Asp His Leu Val Phe Val Val His Gly Ile Gly
 210 215 220
 Pro Ala Cys Asp Leu Arg Phe Arg Ser Ile Val Gln Cys Val Asn Asp
 225 230 235 240
 Phe Arg Ser Val Ser Leu Asn Leu Leu Gln Thr His Phe Lys Lys Ala
 245 250 255
 Gln Glu Asn Gln Gln Ile Gly Arg Val Glu Phe Leu Pro Val Asn Trp
 260 265 270
 His Ser Pro Leu His Ser Thr Gly Val Asp Val Asp Leu Gln Arg Ile
 275 280 285
 Thr Leu Pro Ser Ile Asn Arg Leu Arg His Phe Thr Asn Asp Thr Ile
 290 295 300
 Leu Asp Val Phe Phe Tyr Asn Ser Pro Thr Tyr Cys Gln Thr Ile Val
 305 310 315 320
 Asp Thr Val Ala Ser Glu Met Asn Arg Ile Tyr Thr Leu Phe Leu Gln
 325 330 335

Arg Asn Pro Asp Phe Lys Gly Gly Val Ser Ile Ala Gly His Ser Leu
 340 345 350
 Gly Ser Leu Ile Leu Phe Asp Ile Leu Thr Asn Gln Lys Asp Ser Leu
 355 360 365
 Gly Asp Ile Asp Ser Glu Lys Asp Ser Leu Asn Ile Val Met Asp Gln
 370 375 380
 Gly Asp Thr Pro Thr Leu Glu Glu Asp Leu Lys Lys Leu Gln Leu Ser
 385 390 395 400
 Glu Phe Phe Asp Ile Phe Glu Lys Glu Lys Val Asp Lys Glu Ala Leu
 405 410 415
 Ala Leu Cys Thr Asp Arg Asp Leu Gln Glu Ile Gly Ile Pro Leu Gly
 420 425 430
 Pro Arg Lys Lys Ile Leu Asn Tyr Phe Ser Thr Arg Lys Asn Ser Met
 435 440 445
 Gly Ile Lys Arg Pro Ala Pro Gln Pro Ala Ser Gly Ala Asn Ile Pro
 450 455 460
 Lys Glu Ser Glu Phe Cys Ser Ser Ser Asn Thr Arg Asn Gly Asp Tyr
 465 470 475 480
 Leu Asp Val Gly Ile Gly Gln Val Ser Val Lys Tyr Pro Arg Leu Ile
 485 490 495
 Tyr Lys Pro Glu Ile Phe Phe Ala Phe Gly Ser Pro Ile Gly Met Phe
 500 505 510
 Leu Thr Val Arg Gly Leu Lys Arg Ile Asp Pro Asn Tyr Arg Phe Pro
 515 520 525
 Thr Cys Lys Gly Phe Phe Asn Ile Tyr His Pro Phe Asp Pro Val Ala
 530 535 540
 Tyr Arg Ile Glu Pro Met Val Val Pro Gly Val Glu Phe Glu Pro Met
 545 550 555 560
 Leu Ile Pro His His Lys Gly Arg Lys Arg Met His Leu Glu Leu Arg
 565 570 575
 Glu Gly Leu Thr Arg Met Ser Met Asp Leu Lys Asn Asn Leu Leu Gly
 580 585 590
 Ser Leu Arg Met Ala Trp Lys Ser Phe Thr Arg Ala Pro Tyr Pro Ala
 595 600 605
 Leu Gln Ala Ser Glu Thr Pro Glu Glu Thr Glu Ala Glu Pro Glu Ser
 610 615 620

Thr Ser Glu Lys Pro Ser Asp Val Asn Thr Glu Glu Thr Ser Val Ala
 625 630 635 640
 Val Lys Glu Glu Val Leu Pro Ile Asn Val Gly Met Leu Asn Gly Gly
 645 650 655
 Gln Arg Ile Asp Tyr Val Leu Gln Glu Lys Pro Ile Glu Ser Phe Asn
 660 665 670
 Glu Tyr Leu Phe Ala Leu Gln Ser His Leu Cys Tyr Trp Glu Ser Glu
 675 680 685
 Asp Thr Val Leu Leu Val Leu Lys Glu Ile Tyr Gln Thr Gln Gly Ile
 690 695 700
 Phe Leu Asp Gln Pro Leu Gln
 705 710

<210> 3795

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3795

Met Ser Arg Val Met Pro Ala Trp Phe Leu Phe His Ala Trp Arg Ile
 1 5 10 15
 Cys Ile Gly Glu Leu Arg Thr Ala Ala Lys Val Ser Gly Gln Gly Trp
 20 25 30
 Trp Ala Gln Trp Ala Ala Cys Gly Arg Cys Leu Ala Met Val Arg Arg
 35 40 45
 Cys Glu Ser Pro Pro Gly Ser Arg Ala Val Gly Gly Gln Leu Arg His
 50 55 60
 Gly Ser His Pro Gln Pro Ser Glu Trp Leu Pro Cys Ser Thr Gln Gly
 65 70 75 80
 Gly Lys Arg Glu Arg Pro Met Pro Ala Val Ser Ser Val Leu Cys Leu
 85 90 95
 His Cys Cys Phe Pro Ser Phe Leu Cys Arg Ser Trp Ser Ser Gln Arg
 100 105 110
 Gln His Lys Ala Gly Glu Arg Gly Gly Gly Gly Lys Met Glu Glu
 115 120 125

Pro Thr Leu Leu Pro Pro Arg Leu Arg Glu Arg Asn Ile Ser Leu Asp
 130 135 140

Trp Lys Val Pro Ile Arg Gln Tyr
 145 150

<210> 3796

<211> 890

<212> PRT

<213> Homo sapiens

<400> 3796

Met Asp Phe Gly Thr Val Arg Glu Thr Leu Asp Ala Gly Asn Tyr Asp
 1 5 10 15

Ser Pro Leu Glu Phe Cys Lys Asp Ile Arg Leu Ile Phe Ser Asn Ala
 20 25 30

Lys Ala Tyr Thr Pro Asn Lys Arg Ser Lys Ile Tyr Ser Met Thr Leu
 35 40 45

Arg Leu Ser Ala Leu Phe Glu Glu Lys Met Lys Lys Ile Ser Ser Asp
 50 55 60

Phe Lys Ile Gly Gln Lys Phe Asn Glu Lys Leu Arg Arg Ser Gln Arg
 65 70 75 80

Phe Lys Gln Arg Gln Asn Cys Lys Gly Asp Ser Gln Pro Asn Lys Ser
 85 90 95

Ile Arg Asn Leu Lys Pro Lys Arg Leu Lys Ser Gln Thr Lys Ile Ile
 100 105 110

Pro Glu Leu Val Gly Ser Pro Thr Gln Ser Thr Ser Ser Arg Thr Ala
 115 120 125

Tyr Leu Gly Thr His Lys Thr Ser Ala Gly Ile Ser Ser Gly Val Thr
 130 135 140

Ser Gly Asp Ser Ser Asp Ser Ala Glu Ser Ser Glu Arg Arg Lys Arg
 145 150 155 160

Asn Arg Pro Ile Thr Asn Gly Ser Thr Leu Ser Glu Ser Glu Val Glu
 165 170 175

Asp Ser Leu Ala Thr Ser Leu Ser Ser Ser Ala Ser Ser Ser Ser Glu

180	185	190
Glu Ser Lys Glu Ser Ser Arg Ala Arg Glu Ser Ser Ser Arg Ser Gly		
195	200	205
Leu Ser Arg Ser Ser Asn Leu Arg Val Thr Arg Thr Arg Ala Ala Gln		
210	215	220
Arg Lys Thr Gly Pro Val Ser Leu Ala Asn Gly Cys Gly Arg Lys Ala		
225	230	235
Thr Arg Lys Arg Val Tyr Leu Ser Asp Ser Asp Asn Asn Ser Leu Glu		
245	250	255
Thr Gly Glu Ile Leu Lys Ala Arg Ala Gly Asn Asn Arg Lys Val Leu		
260	265	270
Arg Lys Cys Ala Ala Val Ala Ala Asn Lys Ile Lys Leu Met Ser Asp		
275	280	285
Val Glu Glu Asn Ser Ser Ser Glu Ser Val Cys Ser Gly Arg Lys Leu		
290	295	300
Pro His Arg Asn Ala Ser Ala Val Ala Arg Lys Lys Leu Leu His Asn		
305	310	315
Ser Glu Asp Glu Gln Ser Leu Lys Ser Glu Ile Glu Glu Glu Glu Leu		
325	330	335
Lys Asp Glu Asn Gln Leu Leu Pro Val Ser Ser Ser His Thr Ala Gln		
340	345	350
Ser Asn Val Asp Glu Ser Glu Asn Arg Asp Ser Glu Ser Glu Ser Asp		
355	360	365
Leu Arg Val Ala Arg Lys Asn Trp His Ala Asn Gly Tyr Lys Ser His		
370	375	380
Thr Pro Ala Pro Ser Lys Thr Lys Phe Leu Lys Ile Glu Ser Ser Glu		
385	390	395
Glu Asp Ser Lys Ser His Asp Ser Asp His Ala Cys Asn Arg Thr Ala		
405	410	415
Gly Pro Ser Thr Ser Val Gln Lys Leu Lys Ala Glu Ser Ile Ser Glu		
420	425	430
Glu Ala Asp Ser Glu Pro Gly Arg Ser Gly Gly Arg Lys Tyr Asn Thr		
435	440	445
Phe His Lys Asn Ala Ser Phe Phe Lys Lys Thr Lys Ile Leu Ser Asp		
450	455	460
Ser Glu Asp Ser Glu Ser Glu Glu Gln Asp Arg Glu Asp Gly Lys Cys		

465		470		475		480
His Lys Met Glu Met Asn Pro Ile Ser Gly Asn Leu Asn Cys Asp Pro						
	485		490		495	
Ile Ala Met Ser Gln Cys Ser Ser Asp His Gly Cys Glu Thr Asp Leu						
	500		505		510	
Asp Ser Asp Asp Asp Lys Ile Glu Lys Pro Asn Asn Phe Met Lys Asp						
	515		520		525	
Ser Ala Ser Gln Asp Asn Gly Leu Ser Arg Lys Ile Ser Arg Lys Arg						
	530		535		540	
Val Cys Ser Ser Asp Ser Asp Ser Ser Leu Gln Val Val Lys Lys Ser						
545		550		555		560
Ser Lys Ala Arg Thr Gly Leu Leu Arg Ile Thr Arg Arg Cys Ala Ala						
	565		570		575	
Thr Ala Ala Asn Lys Ile Lys Leu Met Ser Asp Val Glu Asp Val Ser						
	580		585		590	
Leu Glu Asn Val His Thr Arg Ser Lys Asn Gly Arg Lys Lys Pro Leu						
	595		600		605	
His Leu Ala Cys Thr Thr Ala Lys Lys Lys Leu Ser Asp Cys Glu Gly						
	610		615		620	
Ser Val His Cys Glu Val Pro Ser Glu Gln Tyr Ala Cys Glu Gly Lys						
625		630		635		640
Pro Pro Asp Pro Asp Ser Glu Gly Ser Thr Lys Val Leu Ser Gln Ala						
	645		650		655	
Leu Asn Gly Asp Ser Asp Ser Glu Asp Met Leu Asn Ser Glu His Lys						
	660		665		670	
His Arg His Thr Asn Ile His Lys Ile Asp Ala Pro Ser Lys Arg Lys						
	675		680		685	
Ser Ser Ser Val Thr Ser Ser Gly Glu Asp Ser Lys Ser His Ile Pro						
	690		695		700	
Gly Ser Glu Thr Asp Arg Thr Phe Ser Ser Glu Ser Thr Leu Ala Gln						
705		710		715		720
Lys Ala Thr Ala Glu Asn Asn Phe Glu Val Glu Leu Asn Tyr Gly Leu						
	725		730		735	
Arg Arg Trp Asn Gly Arg Arg Leu Arg Thr Tyr Gly Lys Ala Pro Phe						
	740		745		750	
Ser Lys Thr Lys Val Ile His Asp Ser Gln Glu Thr Ala Glu Lys Glu						

755	760	765
Val Lys Arg Lys Arg Ser His Pro Glu Leu Glu Asn Val Lys Ile Ser		
770	775	780
Glu Thr Thr Gly Asn Ser Lys Phe Arg Pro Asp Thr Ser Ser Lys Ser		
785	790	795
Ser Asp Leu Gly Ser Val Thr Glu Ser Asp Ile Asp Cys Thr Asp Asn		800
	805	810
Thr Lys Thr Lys Arg Arg Lys Thr Lys Gly Lys Ala Lys Val Val Arg		815
	820	825
Lys Glu Phe Val Pro Arg Asp Arg Glu Pro Asn Thr Lys Val Arg Thr		830
	835	840
Cys Met His Asn Gln Lys Asp Ala Val Gln Met Pro Ser Glu Thr Leu		845
	850	855
Lys Ala Lys Met Val Pro Glu Lys Val Pro Arg Arg Cys Ala Thr Val		860
865	870	875
		880
Ala Ala Asn Lys Ile Lys Ile Met Ser Asn		
	885	890

<210> 3797

<211> 874

<212> PRT

<213> Homo sapiens

<400> 3797

Met Pro Gln Met Lys Ser Asp Lys Arg Glu Trp Ala Phe Val Lys Thr
1 5 10 15
Ala Arg His Asn Trp Tyr Ser Arg Arg Phe Phe Phe Leu Ser Asn Asp
20 25 30
Glu Leu Leu Glu Ile Leu Ser Glu Thr Lys Asp Pro Leu Arg Val Gln
35 40 45
Pro His Leu Lys Lys Cys Phe Glu Gly Ile Ala Lys Leu Glu Phe Thr
50 55 60
Asp Asn Leu Gly Ile Val Gly Met Ile Ser Ser Glu Lys Glu Thr Val
65 70 75 80
Pro Phe Ile Gln Lys Ile Tyr Pro Ala Asn Ala Lys Gly Met Val Glu

	85	90	95
Lys Trp Leu Gln Gln Val Glu Gln Met Met Leu Ala Ser Met Arg Glu			
	100	105	110
Val Ile Gly Leu Gly Ile Glu Ala Tyr Val Lys Val Pro Arg Asn His			
	115	120	125
Trp Val Leu Gln Trp Pro Gly Gln Val Val Ile Cys Val Ser Ser Ile			
	130	135	140
Phe Trp Thr Gln Glu Val Ser Gln Ala Leu Ala Glu Asn Thr Leu Leu			
145	150	155	160
Asp Phe Leu Lys Lys Ser Asn Asp Gln Ile Ala Gln Ile Val Gln Leu			
	165	170	175
Val Arg Gly Lys Leu Ser Ser Gly Ala Arg Leu Thr Leu Gly Ala Leu			
	180	185	190
Thr Val Ile Asp Val His Ala Arg Asp Val Val Ala Lys Leu Ser Glu			
	195	200	205
Asp Arg Val Ser Asp Leu Asn Asp Phe Gln Trp Ile Ser Gln Leu Arg			
	210	215	220
Tyr Tyr Trp Val Ala Lys Asp Val Gln Val Gln Ile Ile Thr Thr Glu			
225	230	235	240
Ala Leu Tyr Gly Tyr Glu Tyr Leu Gly Asn Ser Pro Arg Leu Val Ile			
	245	250	255
Thr Pro Leu Thr Asp Arg Cys Tyr Arg Thr Leu Met Gly Ala Leu Lys			
	260	265	270
Leu Asn Leu Gly Gly Ala Pro Glu Gly Pro Ala Gly Thr Gly Lys Thr			
	275	280	285
Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Ala Lys Gln Cys Val Val			
	290	295	300
Phe Asn Cys Ser Asp Gly Leu Asp Tyr Lys Ala Met Gly Lys Phe Phe			
305	310	315	320
Lys Gly Leu Ala Gln Ala Gly Ala Trp Ala Cys Phe Asp Glu Phe Asn			
	325	330	335
Arg Ile Glu Val Glu Val Leu Ser Val Val Ala Gln Gln Ile Leu Ser			
	340	345	350
Ile Gln Gln Ala Ile Ile Arg Lys Leu Lys Thr Phe Ile Phe Glu Gly			
	355	360	365
Thr Glu Leu Ser Leu Asn Pro Thr Cys Ala Val Phe Ile Thr Met Asn			

370	375	380	
Pro Gly Tyr Ala Gly Arg Ala Glu Leu Pro Asp Asn Leu Lys Ala Leu			
385	390	395	400
Phe Arg Thr Val Ala Met Met Val Pro Asp Tyr Ala Leu Ile Gly Glu			
	405	410	415
Met Ser Leu Tyr Ser Thr Gly Phe Leu Asp Ser Arg Ser Leu Ala Gln			
	420	425	430
Lys Ile Val Ala Thr Tyr Arg Leu Cys Ser Glu Gln Leu Ser Ser Gln			
	435	440	445
His His Tyr Asp Tyr Gly Met Arg Ala Val Asn Ser Val Leu Thr Ala			
	450	455	460
Ala Gly Asn Leu Lys Leu Lys Tyr Pro Glu Glu Asn Glu Ser Val Leu			
465	470	475	480
Leu Leu Arg Ala Leu Leu Asp Val Asn Leu Ala Lys Phe Leu Ala Gln			
	485	490	495
Asp Val Pro Leu Phe Gln Gly Ile Ile Ser Asp Leu Phe Pro Gly Val			
	500	505	510
Val Leu Pro Lys Pro Asp Tyr Glu Val Phe Leu Lys Val Leu Asn Asp			
	515	520	525
Asn Ile Lys Lys Met Lys Leu Gln Pro Val Pro Trp Phe Ile Gly Lys			
	530	535	540
Ile Ile Gln Ile Tyr Glu Met Met Leu Val Arg His Gly Tyr Met Ile			
545	550	555	560
Val Gly Asp Pro Met Gly Gly Lys Thr Ser Ala Tyr Lys Val Leu Ala			
	565	570	575
Ala Ala Leu Gly Asp Leu His Ala Ala Asn Gln Met Glu Glu Phe Ala			
	580	585	590
Val Glu Tyr Lys Ile Ile Asn Pro Lys Ala Ile Thr Met Gly Gln Leu			
	595	600	605
Tyr Gly Cys Phe Asp Gln Val Ser His Glu Trp Met Asp Gly Val Leu			
	610	615	620
Ala Asn Ala Phe Arg Glu Gln Ala Ser Ser Leu Ser Asp Asp Arg Lys			
625	630	635	640
Trp Ile Ile Phe Asp Gly Pro Val Asp Ala Ile Trp Ile Glu Asn Met			
	645	650	655
Asn Thr Val Leu Asp Asp Asn Lys Lys Leu Cys Leu Met Ser Gly Glu			

660	665	670
Ile Ile Gln Met Asn Ser Lys Met Ser Leu Ile Phe Glu Pro Ala Asp		
675	680	685
Leu Glu Gln Ala Ser Pro Ala Thr Val Ser Arg Cys Gly Met Ile Tyr		
690	695	700
Met Glu Pro His Gln Leu Gly Trp Lys Pro Leu Lys Asp Ser Tyr Met		
705	710	715
Asp Thr Leu Pro Ser Ser Leu Thr Lys Glu His Lys Glu Leu Val Asn		
725	730	735
Asp Met Phe Met Trp Leu Val Gln Pro Cys Leu Glu Phe Gly Arg Leu		
740	745	750
His Cys Lys Phe Val Val Gln Thr Ser Pro Ile His Leu Ala Phe Ser		
755	760	765
Met Met Arg Leu Tyr Ser Ser Leu Leu Asp Glu Ile Arg Ala Val Glu		
770	775	780
Glu Glu Glu Met Glu Leu Gly Glu Gly Leu Ser Ser Gln Gln Ile Phe		
785	790	795
Leu Trp Leu Gln Gly Leu Phe Leu Phe Ser Leu Val Trp Thr Val Ala		
805	810	815
Gly Thr Ile Asn Ala Asp Ser Arg Lys Lys Phe Asp Val Phe Phe Arg		
820	825	830
Asn Leu Ile Met Gly Met Asp Asp Asn His Pro Arg Pro Lys Ser Val		
835	840	845
Lys Leu Thr Lys Asn Asn Ile Phe Pro Glu Arg Gly Ser Ile Tyr Asp		
850	855	860
Phe Tyr Phe Ile Lys Gln Ala Ser Gly His		
865	870	

<210> 3798

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3798

Met Glu Ser Ile Tyr Leu Gln Lys His Leu Gly Ala Cys Leu Thr Gln

1	5	10	15
Gly Leu Ala Glu Val	Ala Arg Val Arg	Pro Val Asp Pro	Ile Glu Tyr
20	25	30	
Leu Ala Leu Trp Ile	Tyr Lys Tyr Lys	Glu Asn Val Thr	Met Glu Gln
35	40	45	
Leu Arg Gln Lys Glu	Met Ala Lys Leu	Glu Arg Glu Arg	Glu Leu Ala
50	55	60	
Leu Met Glu Gln Glu	Met Met Glu Arg	Leu Lys Ala Glu	Glu Leu Leu
65	70	75	80
Leu Gln Gln Gln Gln	Leu Ala Leu Gln	Leu Glu Leu Glu	Met Gln Glu
85	90	95	
Lys Glu Arg Gln Arg	Ile Gln Glu Leu	Gln Arg Ala Gln	Glu Gln Leu
100	105	110	
Gly Lys Glu Met Arg	Met Asn Met Glu	Asn Leu Val Arg	Asn Glu Asp
115	120	125	
Ile Leu His Ser Glu	Glu Ala Thr Leu	Asp Ser Gly Lys	Thr Leu Ala
130	135	140	
Glu Ile Ser Asp Arg	Tyr Gly Ala Pro	Asn Leu Ser Arg	Val Glu Glu
145	150	155	160
Leu Asp Glu Pro Met	Phe Ser Asp Val	Ser Ile Ser Val	Phe Cys Glu
165	170	175	
Lys Thr Arg Phe Cys	Phe Cys Phe		
180			

<210> 3799

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3799

Met Val Met Gly Tyr	Ser Ala Gly Ala	Leu His Trp Ser	Gly Met Val
1	5	10	15
Cys Gln Cys Arg Ser	Tyr Gly Val Gly	Pro Gln Ser Pro	Gln Asp Cys
20	25	30	
Ser Ala Ser Arg Cys	Gly Leu Ala Gly	Ala Pro Gly Glu	Ala Ser Arg

35	40	45
Ala Arg Gly Pro Gln Val Gly Leu Ala Leu Phe Asp Gly Gln Asp His		
50	55	60
Pro Ala Glu Phe Arg Ser Asp Asp Ser Pro Arg Ala Lys Val Ser Cys		
65	70	75
Gly Ser Lys Leu Ser Leu Val Gly Met Ala Val Pro Gly His Ser Pro		
85	90	95
Leu Gln Thr Leu Leu Arg Pro Thr Leu Trp Ala Pro His Gln Leu Ala		
100	105	110
Cys His Pro Tyr His Phe Ser Lys Gln Leu Ser Leu Thr Thr Arg		
115	120	125

<210> 3800

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3800

Met Ser Val Pro Thr Ser Thr Leu Asp Ser Gln Ser Pro Pro Thr Ala		
1	5	10
His Thr Ala Lys Cys Thr Ala Leu Cys Ser Leu Met Pro His Gly Ser		
20	25	30
Arg Glu His Ser Val Glu Ile Pro Lys Asp Gln Leu Ala Ser Pro Thr		
35	40	45
Glu Pro Arg Pro Trp Glu Gln Gln Cys Tyr His Gly Asn Gly Gln Ser		
50	55	60
Tyr Arg Gly Thr Tyr Phe Thr Thr Val Thr Gly Arg Thr Cys Gln Ala		
65	70	75
Trp Ser Ser Met Thr Pro His Gln His Ser Arg Thr Pro Glu Lys Tyr		
85	90	95
Pro Asn Ala Tyr Val Phe Val Leu Tyr His Lys Arg Arg Lys Gly Gln		
100	105	110
Leu Lys Phe Leu Leu Glu Glu Ser Cys Phe Glu Leu Thr Ala Gln Asp		
115	120	125
Ser Thr Cys Val Arg Cys Lys Gly His Ser Lys Met Ser Gln Glu His		

130 135 140
 Cys Leu Gly Ala Lys Ser Leu Arg Glu Glu Lys Tyr
 145 150 155

<210> 3801

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3801

Met Gly Val Ser Gly Pro Leu Val Leu Val Leu Ser Thr Glu Phe Arg
 1 5 10 15
 His Leu Tyr Leu Pro Lys Tyr Glu Gln Thr Thr Tyr Thr Cys Ala His
 20 25 30
 Val Ala Arg Glu Thr Ser Ala Leu Lys Leu Arg Pro Arg Val His Leu
 35 40 45
 Ala Cys Val Leu Ser Val His Thr Pro Thr Lys His Pro Gly Ala Thr
 50 55 60
 Pro Gly Ala Ser Ala Ile Gly Gly Cys Pro Phe Pro Glu Ala Gln Ala
 65 70 75 80
 Pro Pro Ser Pro Ser Arg Ile Leu Arg Phe Pro Trp Gln Leu Val Gln
 85 90 95
 Glu Gln Val Arg Gln Thr Met Ala Glu Ala Leu Lys Val Trp Ser Asp
 100 105 110
 Val Thr Pro Leu Thr Phe Thr Glu Val His Glu Gly Arg Ala Asp Ile
 115 120 125
 Met Ile Asp Phe Ala Arg Tyr Trp His Gly Asp Asp Leu Pro Phe Asp
 130 135 140
 Gly Pro Gly Gly Ile Leu Ala His Ala Phe Phe Pro Lys Thr His Arg
 145 150 155 160
 Glu Gly Asp Val His Phe Asp Tyr Asp Glu Thr Trp Thr Ile Gly Asp
 165 170 175
 Asp Gln Gly Thr Asp Leu Leu Gln Val Ala Ala His Glu Phe Gly His
 180 185 190
 Val Leu Gly Leu Gln His Thr Thr Ala Ala Lys Ala Leu Met Ser Ala

195	200	205
Phe Tyr Thr Phe Arg Tyr Pro Leu Ser Leu Ser Pro Asp Asp Cys Arg		
210	215	220
Gly Val Gln His Leu Tyr Gly Gln Pro Trp Pro Thr Val Thr Ser Arg		
225	230	235
Thr Pro Ala Leu Gly Pro Gln Ala Gly Ile Asp Thr Asn Glu Ile Ala		
245	250	255
Pro Leu Glu Pro Asp Ala Pro Pro Asp Ala Cys Glu Ala Ser Phe Asp		
260	265	270
Ala Val Ser Thr Ile Arg Gly Glu Leu Phe Phe Phe Lys Ala Gly Phe		
275	280	285
Val Trp Arg Leu Arg Gly Gly Gln Leu Gln Pro Gly Tyr Pro Ala Leu		
290	295	300
Ala Ser Arg His Trp Gln Gly Leu Pro Ser Pro Val Asp Ala Ala Phe		
305	310	315
Glu Asp Ala Gln Gly His Ile Trp Phe Phe Gln Gly Ala Gln Tyr Trp		
325	330	335
Val Tyr Asp Gly Glu Lys Pro Val Leu Gly Pro Ala Pro Leu Thr Glu		
340	345	350
Leu Gly Leu Val Arg Phe Pro Val His Ala Ala Leu Val Trp Gly Pro		
355	360	365
Glu Lys Asn Lys Ile Tyr Phe Phe Arg Gly Arg Asp Tyr Trp Arg Phe		
370	375	380
His Pro Ser Thr Arg Arg Val Asp Ser Pro Val Pro Arg Arg Ala Thr		
385	390	395
Asp Trp Arg Gly Val Pro Ser Glu Ile Asp Ala Ala Phe Gln Asp Ala		
405	410	415
Asp Gly Tyr Ala Tyr Phe Leu Arg Gly Arg Leu Tyr Trp Lys Phe Asp		
420	425	430
Pro Val Lys Val Lys Ala Leu Glu Gly Phe Pro Arg Leu Val Gly Pro		
435	440	445
Asp Phe Phe Gly Cys Ala Glu Pro Ala Asn Thr Phe Leu		
450	455	460

<210> 3802

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3802

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Met Ala Ala Arg Gln Gln Gln Gln Ile Glu Asn Gln Gln Gln Met Leu
  1             5             10            15
Val Ala Lys Glu Gln Arg Leu His Phe Leu Lys Gln Gln Glu Arg Arg
      20             25             30
Gln Gln Gln Ser Ile Ser Glu Asn Glu Lys Leu Gln Lys Leu Lys Glu
      35             40             45
Arg Val Glu Ala Gln Glu Asn Lys Leu Lys Lys Ile Arg Ala Met Arg
      50             55             60
Gly Gln Val Asp Tyr Ser Lys Ile Met Asn Gly Asn Leu Ser Ala Glu
      65             70             75            80
Ile Glu Arg Phe Ser Ala Met Phe Gln Glu Lys Lys Gln Glu Val Gln
      85             90            95
Thr Ala Ile Leu Arg Val Asp Gln Leu Ser Gln Gln Leu Glu Asp Leu
      100            105            110
Lys Lys Gly Lys Leu Asn Gly Phe Gln Ser Tyr Asn Gly Lys Leu Thr
      115            120            125
Gly Pro Ala Ala Val Glu Leu Lys Arg Leu Tyr Gln Glu Leu Gln Ile
      130            135            140
Arg Asn Gln Leu Asn Gln Glu Gln Asn Ser Lys Leu Gln Gln Gln Lys
      145            150            155            160
Glu Leu Leu Asn Lys Arg Asn Met Glu Val Ala Met Met Asp Lys Arg
      165            170            175
Ile Ser Glu Leu Arg Glu Arg Leu Tyr Gly Lys Lys Ile Gln Leu Asn
      180            185            190
Arg Val Asn Gly Thr Ser Ser Pro Gln Ser Pro Leu Ser Thr Ser Gly
      195            200            205
Arg Val Ala Ala Val Gly Pro Tyr Ile Gln Val Pro Ser Ala Gly Ser
      210            215            220
Phe Pro Val Leu Gly Asp Pro Ile Lys Pro Gln Ser Leu Ser Ile Ala
      225            230            235            240
Ser Asn Ala Ala His Gly Arg Ser Lys Ser Ala Asn Asp Gly Asn Trp

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	245		250		255
Pro Thr Leu Lys Gln Asn Ser Ser Ser Ser Val Lys Pro Val Gln Val					
	260		265		270
Ala Gly Ala Asp Trp Lys Asp Pro Ser Val Glu Gly Ser Val Lys Gln					
	275		280		285
Gly Thr Val Ser Ser Gln Pro Val Pro Phe Ser Ala Leu Gly Pro Thr					
	290		295		300
Glu Lys Pro Gly Ile Glu Ile Gly Lys Val Pro Pro Pro Ile Pro Gly					
305		310		315	320
Val Gly Lys Gln Leu Pro Pro Ser Tyr Gly Thr Tyr Pro Ser Pro Thr					
	325		330		335
Pro Leu Gly Pro Gly Ser Thr Ser Ser Leu Glu Arg Arg Lys Glu Gly					
	340		345		350
Ser Leu Pro Arg Pro Ser Ala Gly Leu Pro Ser Arg Gln Arg Pro Thr					
	355		360		365
Leu Leu Pro Ala Thr Gly Ser Thr Pro Gln Pro Gly Ser Ser Gln Gln					
	370		375		380
Ile Gln Gln Arg Ile Ser Val Pro Pro Ser Pro Thr Tyr Pro Pro Ala					
385		390		395	400
Gly Pro Pro Ala Phe Pro Ala Gly Asp Ser Lys Pro Glu Leu Pro Leu					
	405		410		415
Thr Val Ala Ile Arg Pro Phe Leu Ala Asp Lys Gly Ser Arg Pro Gln					
	420		425		430
Ser Pro Arg Lys Gly Pro Gln Thr Val Asn Ser Ser Ser Ile Tyr Ser					
	435		440		445
Met Tyr Leu Gln Gln Ala Thr Pro Pro Lys Asn Tyr Gln Pro Ala Ala					
	450		455		460
His Ser Ala Leu Asn Lys Ser Val Lys Ala Val Tyr Gly Lys Pro Val					
465		470		475	480
Leu Pro Ser Gly Ser Thr Ser Pro Ser Pro Leu Pro Phe Leu His Gly					
	485		490		495
Ser Leu Ser Thr Gly Thr Pro Gln Pro Gln Pro Pro Ser Glu Ser Thr					
	500		505		510
Glu Lys Glu Pro Glu Gln Asp Gly Pro Ala Ala Pro Ala Gly Pro Thr					
	515		520		525
Ser Arg Ser Cys Cys Thr Ser Ala Ser Thr Leu Ser Pro Thr Lys Leu					

530 535 540
 Thr Pro Ile Val His Ser Pro Leu Arg Tyr Gln Ser Asp Ala Asp Leu
 545 550 555 560
 Glu Ala Leu Arg Arg Lys Leu Ala Asn Ala Pro Arg Pro Leu Lys Lys
 565 570 575
 Arg Ser Ser Ile Thr Glu Pro Glu Gly Pro Phe Leu Pro Ala Gln Pro
 580 585 590
 Leu Pro Gly Leu His Gly His Leu Gly Arg Cys Gly Gln Trp Lys His
 595 600 605
 Gln Cys Gln Trp Lys Pro Gly Arg Ala Pro Pro Cys Pro Ala His Ser
 610 615 620
 Pro Thr Pro Arg
 625

<210> 3803

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3803

Met Pro Met Lys Pro Pro Arg Cys Thr Arg Thr Ser Arg Ser Ser Cys
 1 5 10 15
 Ser Arg Thr Thr Leu Arg Pro Ala Ala Ser Pro Asn Thr Thr Ser Ser
 20 25 30
 Arg Gly Leu Thr Val His Pro Pro Cys Ser Ser Lys Leu Arg Met Asp
 35 40 45
 Pro Thr Pro Ala Trp Pro Ala Ser Cys Glu Ala Leu Met Gly Pro Ser
 50 55 60
 Ser Ser Ala Gly Pro Ala Arg Leu Arg Leu Pro Pro Arg Arg His Ser
 65 70 75 80
 Ser Leu Pro Pro Arg Arg Ala Ser Phe Leu Ile Val Ser Arg Ala Ser
 85 90 95
 Lys Ser Trp Glu Cys Ala Gly Pro Val Pro Ala Leu Pro Gly Gly Val
 100 105 110
 Val Ala Val Pro Thr Ser Gln Gln Asp Pro Gln Cys Arg Gly Ser Gln

115 120 125
 Val Ala His Arg Arg Cys Leu Ser Arg Ala Ile Leu Gln Ser Gly Pro
 130 135 140
 Gln Cys Gln Ser Cys Leu Ser Ile Trp Val Thr Ser Ala Arg Ser Arg
 145 150 155 160
 Val Gln Ala Ser Ser Arg Ser
 165

<210> 3804

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3804

Met Glu Pro Leu Glu Ile Pro Val Glu Thr Ile Thr Ser Glu Val Ile
 1 5 10 15
 Glu Lys Cys Thr Thr Pro Leu Ser Asp Asp His Asp Glu Lys Tyr Gly
 20 25 30
 Val Pro Ser Leu Glu Glu Leu Gly Phe Asp Thr Asp Gly Leu Ser Ser
 35 40 45
 Ala Val Trp Pro Gly Gly Glu Thr Glu Ala Leu Thr Arg Leu Glu Arg
 50 55 60
 His Leu Glu Arg Lys Ala Trp Val Ala Asn Phe Glu Arg Pro Arg Met
 65 70 75 80
 Asn Ala Asn Ser Leu Leu Ala Ser Pro Thr Gly Leu Ser Pro Tyr Leu
 85 90 95
 Arg Phe Gly Cys Leu Ser Cys Arg Leu Phe Tyr Phe Lys Leu Thr Asp
 100 105 110
 Leu Tyr Lys Lys Val Lys Lys Asn Ser Ser Pro Pro Leu Ser Leu Tyr
 115 120 125
 Gly Gln Leu Leu Trp Arg Glu Phe Phe Tyr Thr Ala Ala Thr Asn Asn
 130 135 140
 Pro Arg Phe Asp Lys Met Glu Gly Asn Pro Ile Cys Val Gln Ile Pro
 145 150 155 160
 Trp Asp Lys Asn Pro Glu Ala Leu Ala Lys Trp Ala Glu Gly Arg Thr

165 170 175
 Gly Phe Pro Trp Ile Asp Ala Ile Met Thr Gln Leu Arg Gln Glu Gly
 180 185 190
 Trp Ile His His Leu Ala Arg His Ala Val Ala Cys Phe Leu Thr Arg
 195 200 205
 Gly Asp Leu Trp Ile Ser Trp Glu Glu Gly Met Lys Val Phe Glu Glu
 210 215 220
 Leu Leu Leu Asp Ala Asp Trp Ser Ile Asn Ala Gly Ser Trp Met Trp
 225 230 235 240
 Leu Ser Cys Ser Ser Phe Phe Gln Gln Phe Phe His Cys Tyr Cys Pro
 245 250 255
 Val Gly Phe Gly Arg Arg Thr Asp Pro Asn Gly Asp Tyr Ile Arg Arg
 260 265 270
 Tyr Leu Pro Val Leu Arg Gly Phe Pro Ala Lys Tyr Ile Tyr Asp Pro
 275 280 285
 Trp Asn Ala Pro Glu Gly Ile Gln Lys Val Ala Lys Cys Leu Ile Gly
 290 295 300
 Val Asn Tyr Pro Lys Pro Met Val Asn His Ala Glu Ala Ser Arg Leu
 305 310 315 320
 Asn Ile Glu Arg Met Lys Gln Ile Tyr Gln Gln Leu Ser Arg Tyr Arg
 325 330 335
 Gly Leu Glu Asn Phe Phe Val Leu
 340

<210> 3805

<211> 485

<212> PRT

<213> Homo sapiens

<400> 3805

Met Asp Asn Glu Cys Val Ala Gln Thr Trp Phe Arg Phe Leu His Met
 1 5 10 15
 Leu Ser Asn Pro Val Asp Leu Ser Asn Pro Ala Ile Ile Ser Ser Thr
 20 25 30
 Pro Lys Phe Gln Glu Gln Phe Leu Asn Val Ser Gly Met Pro Gln Glu

35	40	45			
Leu Asn Gln Tyr Pro Cys Leu Lys His Leu Pro Gln Ile Phe Phe Arg					
50	55	60			
Ala Met Arg Gly Ile Ser Cys Leu Val Asp Ala Phe Leu Gly Ile Ser					
65	70	75	80		
Arg Pro Arg Ser Asp Ser Ala Pro Pro Thr Pro Val Asn Arg Leu Ser					
	85	90	95		
Met Pro Gln Ser Ala Ala Val Ser Thr Thr Pro Pro His Asn Arg Arg					
100	105	110			
His Arg Ala Val Thr Val Asn Lys Ala Thr Met Lys Thr Ser Thr Val					
115	120	125			
Ser Thr Ala His Ala Ser Lys Val Gln His Gln Thr Ser Ser Thr Ser					
130	135	140			
Pro Leu Ser Ser Pro Asn Gln Thr Ser Ser Glu Pro Arg Pro Leu Pro					
145	150	155	160		
Ala Pro Arg Arg Pro Lys Val Asn Ser Ile Leu Asn Leu Phe Gly Ser					
	165	170	175		
Trp Leu Phe Asp Ala Ala Phe Val His Cys Lys Leu His Asn Gly Ile					
180	185	190			
Asn Arg Asp Ser Ser Met Thr Ala Ile Thr Thr Gln Ala Ser Met Glu					
195	200	205			
Phe Arg Arg Lys Gly Ser Gln Met Ser Thr Asp Thr Met Val Ser Asn					
210	215	220			
Pro Met Phe Asp Ala Ser Glu Phe Pro Asp Asn Tyr Glu Ala Gly Arg					
225	230	235	240		
Ala Glu Ala Cys Gly Thr Leu Cys Arg Ile Phe Cys Ser Lys Lys Thr					
	245	250	255		
Gly Glu Glu Ile Leu Pro Ala Tyr Leu Ser Arg Phe Tyr Met Leu Leu					
260	265	270			
Ile Gln Gly Leu Gln Ile Asn Asp Tyr Val Cys His Pro Val Leu Ala					
275	280	285			
Ser Val Ile Leu Asn Ser Pro Pro Leu Phe Cys Cys Asp Leu Lys Gly					
290	295	300			
Ile Asp Val Val Val Pro Tyr Phe Ile Ser Ala Leu Glu Thr Ile Leu					
305	310	315	320		
Pro Asp Arg Glu Leu Ser Lys Phe Lys Ser Tyr Val Asn Pro Thr Glu					

325 330 335
 Leu Arg Arg Ser Ser Ile Asn Ile Leu Leu Ser Leu Leu Pro Leu Pro
 340 345 350
 His His Phe Gly Thr Val Lys Ser Glu Val Val Leu Glu Gly Lys Phe
 355 360 365
 Ser Asn Asp Asp Ser Ser Ser His Asp Lys Pro Ile Thr Phe Leu Ser
 370 375 380
 Leu Lys Leu Arg Leu Val Asn Ile Leu Ile Gly Ala Leu Gln Thr Glu
 385 390 395 400
 Thr Asp Pro Asn Asn Thr Gln Met Ile Leu Gly Ala Met Leu Asn Ile
 405 410 415
 Val Gln Asp Ser Ala Leu Leu Glu Ala Ile Gly Cys Gln Met Glu Met
 420 425 430
 Gly Gly Gly Glu Asn Asn Leu Lys Ser His Ser Arg Thr Asn Ser Gly
 435 440 445
 Ile Ser Ser Ala Ser Gly Gly Ser Thr Glu Pro Thr Thr Pro Asp Ser
 450 455 460
 Glu Arg Pro Ala Gln Ala Leu Leu Arg Val Met Leu Leu Ile Gln Ile
 465 470 475 480
 Gln Leu Leu Gly Ser
 485

<210> 3806

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3806

Met Phe Ala Cys Ala Lys Leu Ala Cys Thr Pro Ser Leu Ile Arg Ala
 1 5 10 15
 Gly Ser Arg Val Ala Tyr Arg Pro Ile Ser Ala Ser Val Leu Ser Gln
 20 25 30
 Pro Glu Ala Ser Arg Thr Gly Glu Gly Ser Ala Val Phe Asn Gly Ala
 35 40 45
 Gln Asn Gly Val Ser Gln Leu Ile Gln Arg Gly Phe Gln Thr Ser Ala

50	55	60
Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala		
65	70	75
Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe		
85	90	95
Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln		
100	105	110
Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly		
115	120	125
Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met		
130	135	140

<210> 3807

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3807

Met His Ser Lys Leu Ser His Cys Phe Phe Val Pro Leu Thr Cys Ile		
1	5	10
Ser Trp Ile Met Leu Phe Leu Asp Phe Leu Phe Arg Ala Val Arg Ile		
20	25	30
His Phe Leu Leu Cys His Cys Lys Ile Leu Ala Gly Ser Pro Ile Thr		
35	40	45
Val Cys Thr Ala Leu Ser Cys Arg Gln Gly Gln Gly Glu Thr Ser Ala		
50	55	60
Met Ala Ser Tyr Val Ala Arg Asn Leu Leu Met Ser Pro Ser Lys Thr		
65	70	75
Val Gly Pro Ala Ser Ala Arg Pro Cys Ala Leu Lys Ser Ser Pro Tyr		
85	90	95
Gly Glu Met Gly Leu Gly		
100		

<210> 3808

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3808

Met Pro Pro Arg Ser Leu Ser Cys His His Gly Thr Gly Trp Ala Trp
 1 5 10 15
 Arg Phe Gly Arg His Trp Lys Leu Arg Gly Glu Glu Ala Gly His Leu
 20 25 30
 Arg Gly Leu Gly His Leu Gly Gly Gln Gly Glu Arg Phe Gly Gly His
 35 40 45
 Gly Ala Gly Arg Phe Gly Ala Leu Gly Glu Asp Phe Gln Gly Leu Gly
 50 55 60
 Ser Pro Gly Gly Gly Ala Glu Arg Gly Gln Arg Ser Leu Asn Ser Arg
 65 70 75 80
 Pro Pro Trp Leu His Pro Gly Asn Gly Pro Leu Leu Leu Arg His Arg
 85 90 95
 Asp Ala Val Ala His
 100

<210> 3809

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3809

Met Arg Glu Phe Ser Leu Ile Glu Leu Trp Leu Met Pro Lys Val Phe
 1 5 10 15
 Asn His Tyr Val Trp Gly Ser Phe Leu Val Gln Arg Lys Lys Lys Gln
 20 25 30
 Pro Lys Ser Val Leu Val Tyr His Cys Thr Ser Gly Asn Leu Asn Pro
 35 40 45
 Cys Asn Arg Gly Lys Met Gly Phe Gln Val Leu Ala Thr Phe Glu Ile
 50 55 60
 Pro Ile Pro Phe Glu Arg Ala Leu Thr Arg Pro Tyr Ala Asp Phe Thr

65 70 75 80
 Thr Ser Asn Phe Arg Thr Gln Tyr Trp Asn Ala Ile Ser Gln Gln Ala
 85 90 95
 Pro Ala Ile Ile Tyr Asp Phe Tyr Leu Trp Leu Thr Gly Arg Lys Pro
 100 105 110
 Ser Tyr Arg Arg Lys Ile Pro Ser Ser Thr Gln Phe Tyr Lys Trp Arg
 115 120 125
 Asn Arg Ser
 130

<210> 3810

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3810

Met Pro Asn Pro Asp Gly Tyr Ile Ile Cys Trp Leu Gln Val Ser Leu
 1 5 10 15
 Thr Ala Arg Phe Ala Ser Ala Glu Lys Ser His Gly Glu Ser Arg Thr
 20 25 30
 His Glu Val Leu Ser His Ile Cys Thr Ser Gly Val Val Ala Val His
 35 40 45
 Ser Pro Leu Asp Ala Val Ser Trp Pro Cys Phe His Pro Ile Pro Val
 50 55 60
 Gly Arg Val Gly Gly Trp Val Gly Glu Ala Ile Glu Cys Met Thr Gln
 65 70 75 80
 Thr Lys Leu Ser Trp Ala Phe Ser Pro Thr Arg Glu Ala Leu Met Ser
 85 90 95
 Phe Ile Glu Ala Leu Lys His Gln Ser Leu Ser Gln Ala Ser Ser Gln
 100 105 110
 Thr Phe Cys Asn Met Ser Ala Leu Thr Arg Phe Lys Ala Asn Val Phe
 115 120 125
 Pro Cys Arg Glu Glu Gly Ala Leu Arg Leu Ile Asp
 130 135 140

<210> 3811

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3811

Met Lys Leu Lys Cys Ile Phe Gly Phe Ala Thr Lys Glu Thr Ser Cys
 1 5 10 15
 Tyr Asn Val Thr Asn Ile Gly Phe Lys Ser Pro Ser Asp Phe Trp Gln
 20 25 30
 Ser Val His Ser Thr Leu Pro Arg Glu Leu Ala Pro Cys Leu Val Phe
 35 40 45
 Asn Thr Ser Pro Asn Leu Ala Leu Phe Ser Ala Ala Phe Ala Phe Ile
 50 55 60
 Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln Glu Leu
 65 70 75 80
 Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro Asp Glu
 85 90 95
 Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys Val Met
 100 105 110
 Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu Leu Gly
 115 120 125
 Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile Leu Ser
 130 135 140
 Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys
 145 150 155

<210> 3812

<211> 1591

<212> PRT

<213> Homo sapiens

<400> 3812

Met Val Gln Gly Arg Val Thr Glu Val Lys Phe Pro Leu Glu His Tyr

1	5	10	15
Ile Leu Glu	Leu Gln Asp His Arg Val	Ala Leu Asn Gly	Ser His Ser
20	25	30	
Glu Lys Val	Ala Ile Leu Asp Asp Lys Thr	Ala Met Val Thr	Ala Ser
35	40	45	
Gln Leu Gly	Gln Thr Asn Leu Val Phe Val	His Lys Asn Val	His Met
50	55	60	
Arg Ser Val	Ser Gly Leu Pro Asn Cys Thr	Ile Tyr Val Val	Glu Pro
65	70	75	80
Gly Phe Leu	Gly Phe Thr Val Gln Pro Gly	Asn Arg Trp Ser	Leu Glu
85	90	95	
Val Gly Gln	Val Tyr Val Ile Thr Val Asp	Val Phe Asp Lys	Ser Ser
100	105	110	
Thr Lys Val	Tyr Ile Ser Asp Asn Leu Arg	Ile Thr Tyr Asp	Phe Pro
115	120	125	
Lys Glu Tyr	Phe Glu Glu Gln Leu Thr Thr	Val Asn Gly Ser	Tyr His
130	135	140	
Ile Val Lys	Ala Leu Lys Asp Gly Val Val	Val Ile Asn Ala	Ser Leu
145	150	155	160
Thr Ser Ile	Ile Tyr Gln Asn Lys Asp Ile	Gln Pro Ile Lys	Phe Leu
165	170	175	
Ile Lys His	Gln Gln Glu Val Lys Ile Tyr	Phe Pro Ile Met	Leu Thr
180	185	190	
Pro Lys Phe	Leu Ala Phe Pro His His	Pro Met Gly Met	Leu Tyr Arg
195	200	205	
Tyr Lys Val	Gln Val Glu Gly Gly Ser Gly	Asn Phe Thr Trp	Thr Ser
210	215	220	
Ser Asn Glu	Thr Val Val Ile Val Thr Thr	Lys Gly Val Val	Thr Ala
225	230	235	240
Gly Gln Val	Arg Gly Asn Ser Thr Val Leu	Ala Arg Asp Val	Gln Asn
245	250	255	
Pro Phe Arg	Tyr Gly Glu Ile Lys Ile His	Val Leu Lys Leu	Asn Lys
260	265	270	
Met Glu Leu	Leu Pro Phe His Ala Asp	Val Glu Ile Gly	Gln Ile Ile
275	280	285	
Glu Ile Pro	Ile Ala Met Tyr His Ile	Asn Lys Glu Thr	Lys Glu Ala

290	295	300
Met Ala Phe Thr Asp Cys Ser His Leu Ser Leu Asp Leu Asn Met Asp		
305	310	315
Lys Gln Gly Val Phe Thr Leu Leu Lys Glu Gly Ile Gln Arg Pro Gly		
325	330	335
Pro Met His Cys Ser Ser Thr His Ile Ala Ala Lys Ser Leu Gly His		
340	345	350
Thr Leu Val Thr Val Ser Val Asn Glu Cys Asp Lys Tyr Leu Glu Ser		
355	360	365
Ser Ala Thr Phe Ala Ala Tyr Glu Pro Leu Lys Ala Leu Asn Pro Val		
370	375	380
Glu Val Ala Leu Val Thr Trp Gln Ser Val Lys Glu Met Val Phe Glu		
385	390	395
Gly Gly Pro Arg Pro Trp Ile Leu Glu Pro Ser Arg Phe Phe Leu Glu		
405	410	415
Leu Asn Ala Glu Lys Thr Glu Lys Ile Gly Ile Ala Gln Val Trp Leu		
420	425	430
Pro Ser Lys Arg Lys Gln Asn Gln Tyr Ile Tyr Arg Ile Gln Cys Leu		
435	440	445
Asp Leu Gly Glu Gln Val Leu Thr Phe Arg Ile Gly Asn His Pro Gly		
450	455	460
Val Leu Asn Pro Ser Pro Ala Val Glu Val Leu Gln Val Arg Phe Ile		
465	470	475
Cys Ala His Pro Ala Ser Met Ser Val Thr Pro Val Tyr Lys Val Pro		
485	490	495
Ala Gly Ala Gln Pro Cys Pro Leu Pro Gln His Asn Lys Trp Leu Ile		
500	505	510
Pro Val Ser Arg Leu Arg Asp Thr Val Leu Glu Leu Ala Val Phe Asp		
515	520	525
Gln His Arg Arg Lys Phe Asp Asn Phe Ser Ser Leu Met Leu Glu Trp		
530	535	540
Lys Ser Ser Asn Glu Thr Leu Ala His Phe Glu Asp Tyr Lys Ser Val		
545	550	555
Glu Met Val Ala Lys Asp Gly Gly Ser Gly Gln Thr Arg Leu His Gly		
565	570	575
His Gln Ile Leu Lys Val His Gln Ile Lys Gly Thr Val Leu Ile Gly		

580	585	590
Val Asn Phe	Val Gly Tyr Ser Glu Lys Lys Ser Pro Lys Glu Ile Ser	
595	600	605
Asn Leu Pro Arg Ser Val Asp Val Glu Leu Leu Leu Val Asp Asp Val		
610	615	620
Thr Val Val Pro Glu Asn Ala Thr Ile Tyr Asn His Pro Asp Val Lys		
625	630	635
Glu Thr Phe Ser Leu Val Glu Gly Ser Gly Tyr Phe Leu Val Asn Ser		
645	650	655
Ser Glu Gln Gly Val Val Thr Ile Thr Tyr Met Glu Ala Glu Ser Ser		
660	665	670
Val Glu Leu Val Pro Leu His Pro Gly Phe Phe Thr Leu Glu Val Tyr		
675	680	685
Asp Leu Cys Leu Ala Phe Leu Gly Pro Ala Thr Ala His Leu Arg Val		
690	695	700
Ser Asp Ile Gln Glu Leu Glu Leu Asp Leu Ile Asp Lys Val Glu Ile		
705	710	715
Asp Lys Thr Val Leu Val Thr Val Arg Val Leu Gly Ser Ser Lys Arg		
725	730	735
Pro Phe Gln Asn Lys Tyr Phe Arg Asn Met Glu Leu Lys Leu Gln Leu		
740	745	750
Ala Ser Ala Ile Val Thr Leu Thr Pro Met Glu Gln Gln Asp Glu Tyr		
755	760	765
Ser Glu Asn Tyr Ile Leu Arg Ala Thr Thr Ile Gly Gln Thr Thr Leu		
770	775	780
Val Ala Ile Ala Lys Asp Lys Met Gly Arg Lys Tyr Thr Ser Thr Pro		
785	790	795
Arg His Ile Glu Val Phe Pro Pro Phe Arg Leu Leu Pro Glu Lys Met		
805	810	815
Thr Leu Ile Pro Met Asn Met Met Gln Val Met Ser Glu Gly Gly Pro		
820	825	830
Gln Pro Gln Ser Ile Val His Phe Ser Ile Ser Asn Gln Thr Val Ala		
835	840	845
Val Val Asn Arg Arg Gly Gln Val Thr Gly Lys Ile Val Gly Thr Ala		
850	855	860
Val Val His Gly Thr Ile Gln Thr Val Asn Glu Asp Thr Gly Lys Val		

865	870	875	880
Ile Val Phe Ser Gln Asp Glu Val Gln Ile Glu Val Val Gln Leu Arg			
885	890	895	
Ala Val Arg Ile Leu Ala Ala Ala Thr Arg Leu Ile Thr Ala Thr Lys			
900	905	910	
Met Pro Val Tyr Val Met Gly Val Thr Ser Thr Gln Thr Pro Phe Ser			
915	920	925	
Phe Ser Asn Ala Asn Pro Gly Leu Thr Phe His Trp Ser Met Ser Lys			
930	935	940	
Arg Asp Val Leu Asp Leu Val Pro Arg His Ser Glu Val Phe Leu Gln			
945	950	955	960
Leu Pro Val Glu His Asn Phe Ala Met Val Val His Thr Lys Ala Ala			
965	970	975	
Gly Arg Thr Ser Ile Lys Val Thr Val His Cys Met Asn Ser Ser Ser			
980	985	990	
Gly Gln Phe Glu Gly Asn Leu Leu Glu Leu Ser Asp Glu Val Gln Ile			
995	1000	1005	
Leu Val Phe Glu Lys Leu Gln Leu Phe Tyr Pro Glu Cys Gln Pro Glu			
1010	1015	1020	
Gln Ile Leu Met Pro Ile Asn Ser Gln Leu Lys Leu His Thr Asn Arg			
1025	1030	1035	1040
Glu Gly Ala Ala Phe Val Ser Ser Arg Val Leu Lys Cys Phe Pro Asn			
1045	1050	1055	
Ser Ser Val Ile Glu Glu Asp Gly Glu Gly Leu Leu Lys Ala Gly Ser			
1060	1065	1070	
Ile Ala Gly Thr Ala Val Leu Glu Val Thr Ser Ile Glu Pro Phe Gly			
1075	1080	1085	
Val Asn Gln Thr Thr Ile Thr Gly Val Gln Val Ala Pro Val Thr Tyr			
1090	1095	1100	
Leu Arg Val Ser Ser Gln Pro Lys Leu Tyr Thr Ala Gln Gly Arg Thr			
1105	1110	1115	1120
Leu Ser Ala Phe Pro Leu Gly Met Ser Leu Thr Phe Thr Val Gln Phe			
1125	1130	1135	
Tyr Asn Ser Ile Gly Glu Lys Phe His Thr His Asn Thr Gln Leu Tyr			
1140	1145	1150	
Leu Ala Leu Asn Arg Asp Asp Leu Leu His Ile Gly Pro Gly Asn Lys			

1155	1160	1165
Asn Tyr Thr Tyr Met Ala Gln Ala Val	Asn Arg Gly Leu Thr Leu Val	
1170	1175	1180
Gly Leu Trp Asp Arg Arg His Pro Gly Met Ala Asp Tyr Ile Pro Val		
1185	1190	1195
1200		
Ala Val Glu His Ala Ile Glu Pro Asp Thr Lys Leu Thr Phe Val Gly		
1205	1210	1215
Asp Ile Ile Cys Phe Ser Thr His Leu Val Ser Gln His Gly Glu Pro		
1220	1225	1230
Gly Ile Trp Met Ile Ser Ala Asn Asn Ile Leu Gln Thr Asp Ile Val		
1235	1240	1245
Thr Gly Val Gly Val Ala Arg Ser Pro Gly Thr Ala Met Ile Phe His		
1250	1255	1260
Asp Ile Pro Gly Val Val Lys Thr Tyr Arg Glu Val Val Val Asn Ala		
1265	1270	1275
1280		
Ser Ser Arg Leu Met Leu Ser Tyr Asp Leu Lys Thr Tyr Leu Thr Asn		
1285	1290	1295
Thr Leu Asn Ser Thr Val Phe Lys Leu Phe Ile Thr Thr Gly Arg Asn		
1300	1305	1310
Gly Val Asn Leu Lys Gly Phe Cys Thr Pro Asn Gln Ala Leu Ala Ile		
1315	1320	1325
Thr Lys Val Leu Leu Pro Ala Thr Leu Met Leu Cys His Val Gln Phe		
1330	1335	1340
Ser Asn Thr Leu Leu Asp Ile Pro Ala Ser Lys Val Phe Gln Val His		
1345	1350	1355
1360		
Ser Asp Phe Ser Met Glu Lys Gly Val Tyr Val Cys Ile Ile Lys Val		
1365	1370	1375
Arg Pro Gln Ser Glu Glu Leu Leu Gln Ala Leu Ser Val Ala Asp Thr		
1380	1385	1390
Ser Val Tyr Gly Trp Ala Thr Leu Val Ser Glu Arg Ser Lys Asn Gly		
1395	1400	1405
Met Gln Arg Ile Leu Ile Pro Phe Ile Pro Ala Phe Tyr Ile Asn Gln		
1410	1415	1420
Ser Glu Leu Val Leu Ser His Lys Gln Asp Ile Gly Glu Ile Arg Val		
1425	1430	1435
1440		

Leu Gly Val Asp Arg Val Leu Arg Lys Leu Glu Val Ile Ser Ser Ser
 1445 1450 1455
 Pro Val Leu Val Val Ala Gly His Ser His Ser Pro Leu Thr Pro Gly
 1460 1465 1470
 Leu Ala Ile Tyr Ser Val Arg Val Val Asn Phe Thr Ser Phe Gln Gln
 1475 1480 1485
 Met Ala Ser Pro Val Phe Ile Asn Ile Ser Cys Val Leu Thr Ser Gln
 1490 1495 1500
 Ser Glu Ala Val Val Val Arg Ala Met Lys Asp Lys Leu Gly Ala Asp
 1505 1510 1515 1520
 His Cys Glu Asp Ser Ala Ile Leu Lys Arg Phe Thr Gly Ser Tyr Gln
 1525 1530 1535
 Ile Leu Leu Leu Thr Leu Phe Ala Val Leu Ala Ser Thr Ala Ser Ile
 1540 1545 1550
 Phe Leu Ala Tyr Ser Ala Phe Leu Asn Lys Ile Gln Thr Val Pro Val
 1555 1560 1565
 Val Tyr Val Pro Thr Leu Gly Thr Pro Gln Pro Gly Phe Leu Thr Pro
 1570 1575 1580
 Gln Val Leu Pro Leu Thr Ser
 1585 1590

<210> 3813

<211> 623

<212> PRT

<213> Homo sapiens

<400> 3813

Met Ser Asp Leu Arg Val Gln Leu Asn Phe Ser Ala Met Ala Ser Glu
 1 5 10 15
 Leu Glu Glu Val Lys Arg Cys Met Glu Arg Lys Asp Lys Glu Lys Ala
 20 25 30
 His Leu Ala Ser Gln Val Glu Asn Leu Thr Arg Glu Leu Glu Asn Gly
 35 40 45
 Glu Lys Gln Gln Leu Gln Met Leu Asp Arg Leu Lys Glu Ile Gln Asn
 50 55 60

His Phe Asp Thr Cys Glu Ala Glu Arg Lys His Ala Asp Leu Gln Ile
 65 70 75 80
 Ser Glu Leu Thr Arg His Ala Glu Asp Ala Thr Lys Gln Ala Glu Arg
 85 90 95
 Tyr Leu Ser Glu Leu Gln Gln Ser Glu Ala Leu Lys Glu Glu Ala Glu
 100 105 110
 Lys Arg Arg Glu Asp Leu Lys Leu Lys Ala Gln Glu Ser Ile Arg Gln
 115 120 125
 Trp Lys Leu Lys His Lys Lys Leu Glu Arg Ala Leu Glu Lys Gln Ser
 130 135 140
 Glu Thr Val Asp Glu Leu Thr Gly Lys Asn Asn Gln Ile Leu Lys Glu
 145 150 155 160
 Lys Asp Glu Leu Lys Thr Gln Leu Tyr Ala Ala Leu Gln Gln Ile Glu
 165 170 175
 Asn Leu Arg Lys Glu Leu Asn Asp Val Leu Thr Lys Arg Ala Leu Gln
 180 185 190
 Glu Glu Glu Leu His Ser Lys Glu Glu Lys Leu Arg Asp Ile Lys Ser
 195 200 205
 His Gln Ala Asp Leu Glu Leu Glu Val Lys Asn Ser Leu Asp Thr Ile
 210 215 220
 His Arg Leu Glu Ser Glu Leu Lys Lys Gln Ser Lys Ile Gln Ser Gln
 225 230 235 240
 Met Lys Val Glu Lys Ala His Leu Glu Glu Glu Ile Ala Glu Leu Lys
 245 250 255
 Lys Ser Gln Ala Gln Asp Lys Ala Lys Leu Leu Glu Met Gln Glu Ser
 260 265 270
 Ile Lys Asp Leu Ser Ala Ile Arg Ala Asp Leu Ala Asn Lys Leu Ala
 275 280 285
 Glu Glu Glu Arg Ala Lys Lys Ala Val Leu Lys Asp Leu Ser Asp Leu
 290 295 300
 Thr Ala Gln Ala Lys Ser Arg Asp Glu Glu Thr Ala Thr Ile Ile Thr
 305 310 315 320
 Gln Leu Lys Leu Glu Arg Asp Val His Gln Arg Glu Leu Lys Asp Leu
 325 330 335
 Thr Ser Ser Leu Gln Ser Val Lys Thr Lys His Glu Gln Asn Ile Gln
 340 345 350

Glu Leu Met Lys His Phe Lys Lys Glu Lys Ser Glu Ala Glu Asn His
 355 360 365
 Ile Arg Thr Leu Lys Ala Glu Ser Leu Glu Glu Lys Asn Met Ala Lys
 370 375 380
 Ile His Arg Gly Gln Leu Glu Lys Leu Lys Ser Gln Cys Asp Arg Leu
 385 390 395 400
 Thr Glu Glu Leu Thr Gln Asn Glu Asn Glu Asn Lys Lys Leu Lys Leu
 405 410 415
 Lys Tyr Gln Cys Leu Lys Asp Gln Leu Glu Glu Arg Glu Lys His Ile
 420 425 430
 Ser Ile Glu Glu Glu His Leu Arg Arg Met Glu Glu Ala Arg Leu Gln
 435 440 445
 Leu Lys Asp Gln Leu Leu Cys Leu Glu Thr Glu Gln Glu Ser Ile Leu
 450 455 460
 Gly Val Ile Gly Lys Glu Ile Asp Ala Ala Cys Lys Thr Phe Ser Lys
 465 470 475 480
 Asp Ser Val Glu Lys Leu Lys Val Phe Ser Ser Gly Pro Asp Ile His
 485 490 495
 Tyr Asp Pro His Arg Trp Leu Ala Glu Ser Lys Thr Lys Leu Gln Trp
 500 505 510
 Leu Cys Glu Glu Leu Lys Glu Arg Glu Asn Arg Glu Lys Asn Leu Arg
 515 520 525
 His Gln Leu Met Leu Cys Arg Gln Gln Leu Arg Asn Leu Thr Glu Asn
 530 535 540
 Lys Glu Ser Glu Leu Gln Cys Leu Phe Gln Gln Ile Glu Arg Gln Glu
 545 550 555 560
 Gln Leu Leu Asp Glu Ile His Arg Glu Lys Arg Asp Leu Leu Glu Glu
 565 570 575
 Thr Gln Arg Lys Asp Glu Glu Met Gly Ser Leu Gln Asp Arg Val Ile
 580 585 590
 Ala Leu Glu Thr Ser Thr Gln Val Ala Leu Asp His Leu Glu Ser Val
 595 600 605
 Pro Glu Lys Leu Ser Leu Leu Glu Asp Phe Lys Asp Phe Arg Arg
 610 615 620

<210> 3814

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3814

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Met Asp Ala Glu Leu Leu Gly Arg Glu Leu Arg Leu Phe Leu Phe Ser
  1              5              10              15
Pro Gln Glu Lys Asn Ser Phe Ser Asp Val Phe Val Val Gly Glu Tyr
              20              25              30
Phe Cys His Cys Phe Glu Lys Thr Ser Pro Pro Asn Ser Pro Ser Phe
              35              40              45
Leu Gly Ile Ser Phe Leu Lys Trp Lys Ala Phe Asn Ile His Ser Lys
              50              55              60
Leu Ala Leu Leu Leu Pro Gln Gly Lys Ile Thr Ser Lys Gln Arg Cys
              65              70              75              80
Leu Pro Ser Val Ser Gly Gly Ala Ser Leu Arg Gly Gly Leu Cys Asp
              85              90              95
Pro Leu Pro Gly Gly Gly Asp Gly Gly His Leu Phe Ile Asn Asp Val
              100             105             110
Arg Leu Lys Val Thr Glu Pro Phe Leu His Met Pro Leu Cys Arg Glu
              115             120             125
Leu Cys Ile Asn Thr Leu Leu Gly Arg Thr Glu Gln Asp Trp Glu Leu
              130             135             140
Arg Ala Asn Pro Phe Leu Arg Ala Ser Asn Ser
145              150              155

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<210> 3815

<211> 577

<212> PRT

<213> Homo sapiens

<400> 3815

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Met Arg Trp Gly Met Pro Pro Gln Asp Ala Phe Thr Thr Gln Trp Leu
  1              5              10              15

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Val Arg Asp Leu Arg Gly Lys Thr Glu Lys Glu Phe Lys Ala Tyr Val			
20	25	30	
Ser Leu Phe Met Arg His Leu Cys Glu Pro Gly Ala Asp Gly Ser Glu			
35	40	45	
Thr Phe Ala Asp Gly Val Pro Arg Glu Gly Leu Ser Arg Gln Gln Val			
50	55	60	
Leu Thr Arg Ile Gly Val Met Ser Leu Val Lys Lys Lys Val Gln Glu			
65	70	75	80
Phe Glu His Ile Asn Gly Arg Trp Ser Met Pro Glu Leu Met Pro Asp			
85	90	95	
Pro Ser Ala Asp Ser Lys Arg Ser Ser Arg Ala Ser Ser Pro Thr Lys			
100	105	110	
Thr Ser Pro Thr Thr Pro Glu Ala Ser Ala Thr Asn Ser Pro Cys Thr			
115	120	125	
Ser Lys Pro Ala Thr Pro Ala Pro Ser Glu Lys Gly Glu Gly Ile Arg			
130	135	140	
Thr Pro Leu Glu Lys Glu Glu Ala Glu Asn Gln Glu Glu Lys Pro Glu			
145	150	155	160
Lys Asn Ser Arg Ile Gly Glu Lys Met Glu Thr Glu Ala Asp Ala Pro			
165	170	175	
Ser Pro Ala Pro Ser Leu Gly Glu Arg Leu Glu Pro Arg Lys Ile Pro			
180	185	190	
Leu Glu Asp Glu Val Pro Gly Val Pro Gly Glu Met Glu Pro Glu Pro			
195	200	205	
Gly Tyr Arg Gly Asp Arg Glu Lys Ser Ala Thr Glu Ser Thr Pro Gly			
210	215	220	
Glu Arg Gly Glu Glu Lys Pro Leu Asp Gly Gln Glu His Arg Glu Arg			
225	230	235	240
Pro Glu Gly Glu Thr Gly Asp Leu Gly Lys Arg Ala Glu Asp Val Lys			
245	250	255	
Gly Asp Arg Glu Leu Arg Pro Gly Pro Arg Asp Glu Pro Arg Ser Asn			
260	265	270	
Gly Arg Arg Glu Glu Lys Thr Glu Lys Pro Arg Phe Met Phe Asn Ile			
275	280	285	
Ala Asp Gly Gly Phe Thr Glu Leu His Thr Leu Trp Gln Asn Glu Glu			

290	295	300
Arg Ala Ala Ile Ser Ser Gly Lys Leu Asn Glu Ile Trp His Arg Arg		
305	310	315
His Asp Tyr Trp Leu Leu Ala Gly Ile Val Leu His Gly Tyr Ala Arg		
325	330	335
Trp Gln Asp Ile Gln Asn Asp Ala Gln Phe Ala Ile Ile Asn Glu Pro		
340	345	350
Phe Lys Thr Glu Ala Asn Lys Gly Asn Phe Leu Glu Met Lys Asn Lys		
355	360	365
Phe Leu Ala Arg Arg Phe Lys Leu Leu Glu Gln Ala Leu Val Ile Glu		
370	375	380
Glu Gln Leu Arg Arg Ala Ala Tyr Leu Asn Leu Ser Gln Glu Pro Ala		
385	390	395
His Pro Ala Met Ala Leu His Ala Arg Phe Ala Glu Ala Glu Cys Leu		
405	410	415
Ala Glu Ser His Gln His Leu Ser Lys Glu Ser Leu Ala Gly Asn Lys		
420	425	430
Pro Ala Asn Ala Val Leu His Lys Val Leu Asn Gln Leu Glu Glu Leu		
435	440	445
Leu Ser Asp Met Lys Ala Asp Val Thr Arg Leu Pro Ala Thr Leu Ser		
450	455	460
Arg Ile Pro Pro Ile Ala Ala Arg Leu Gln Met Ser Glu Arg Ser Ile		
465	470	475
Leu Ser Arg Leu Ala Ser Lys Gly Thr Glu Pro His Pro Thr Pro Ala		
485	490	495
Tyr Pro Pro Gly Pro Tyr Ala Thr Pro Pro Gly Tyr Gly Ala Ala Phe		
500	505	510
Ser Ala Ala Pro Val Gly Ala Leu Ala Ala Ala Gly Ala Asn Tyr Ser		
515	520	525
Gln Met Pro Ala Gly Ser Phe Ile Thr Ala Ala Thr Asn Gly Pro Pro		
530	535	540
Val Leu Val Lys Lys Glu Lys Glu Met Val Gly Ala Leu Val Ser Asp		
545	550	555
Gly Leu Asp Arg Lys Glu Pro Arg Ala Gly Glu Val Ile Cys Ile Asp		
565	570	575
Asp		

<210> 3816

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3816

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Met Thr Ser Ala Lys Thr Leu Arg Gly Arg His Ser Ser Thr Lys Thr
  1             5             10             15
Leu Phe Pro Ser Glu Val Pro Phe Thr Gly Thr Gly Val Arg Thr Ser
      20             25             30
Pro Cys Leu Leu Gly Ala Ile Pro Phe Asn Leu Gln Gln Pro Leu Val
      35             40             45
Ser Val His Asn Ala Asn Glu Val Arg Val Ala Ser Pro Gln Ala Asn
      50             55             60
Asn Phe Pro Gln Ile Ala Ala Arg Cys Gly Pro Ala Lys Ser Gln Gly

      65             70             75             80
Ala Ala Ile Ser Lys Gln Ser Pro Pro Val Leu Glu Gly Val Cys Arg
      85             90             95
Asp Ala Ser Gly Glu Arg Pro Gly Pro Gly Ala Gly Leu Gln Leu Trp
      100            105            110
Asp Lys Leu Leu Ser Gly Pro Gly Ala Thr Gln Arg Arg Gln Ala Ala
      115            120            125
Val Gln Val Lys Pro Ile Gln His Leu Ala Pro Cys Leu Gln Ala
      130            135            140

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<210> 3817

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3817

Met Lys Tyr Phe Ala Pro Ser Arg Gly Pro Gln Leu Ser Leu Gln Val
 1 5 10 15
 Leu Leu Trp Arg Leu Asn Leu Pro Pro Val Ser Arg Ser Ser Gln Leu
 20 25 30
 Ser Leu Leu Ser Phe Leu Gly Arg Trp Asn Phe Leu Arg Pro Arg Arg
 35 40 45
 Pro Pro Thr Leu Pro Pro Glu Ser Ser Ile Glu Ser Val Ala Gln Thr
 50 55 60
 Pro Leu Asn His Glu Val Thr Val Gln Thr Gln Gly Glu Asp Gln Ala
 65 70 75 80
 His Tyr Thr Leu Pro Ser Ile Thr Val Lys Pro Ala Asp Val Glu Ile
 85 90 95
 Ser Ile Thr Ser Glu Pro Thr Thr Asp Thr Asp Ser Ser Pro Ala Gln
 100 105 110
 Gln Ala Ala Pro Asn Gln His Pro Glu Gln Val
 115 120

<210> 3818

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3818

Met Ala Gly Gly Arg Pro Ala Asn Lys Ala Pro Gly Thr Gly Leu Gly
 1 5 10 15
 Gly Thr Pro Gly Val Pro Ser Trp Val Gly Trp Thr Gly Pro Trp Phe
 20 25 30
 Ala Gly Ser Cys Ala Ala Met Arg Leu Leu Ala Gly Gly Ile Arg Gln
 35 40 45
 Pro Pro Ala Ser Leu Ala Gln Val Leu Asp Ser Ile Lys Gly Gln Ser
 50 55 60
 Val Phe Phe Met Leu Thr Ser Met Arg Lys Pro Asn Ala Ser Phe Ser
 65 70 75 80
 Glu Ser Ala Gln Ile Tyr Ser Ala Glu Tyr Arg Phe Val Gln Thr Thr
 85 90 95

Ala Ala Leu Gln Phe Ile Val Thr Ser Lys Gly Lys Gly Gln Lys Asn
 100 105 110

Ile

<210> 3819

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3819

Met Trp His Val Thr Ala Tyr Phe Ser Leu Leu Leu Arg Ala Pro Ser
 1 5 10 15
 Glu Gly Ile Gln Ile Pro Val Ile His Thr Ile Glu Val Lys Ser Phe
 20 25 30
 Gln Ile Arg Lys Ala Gln Phe Phe Leu Gln Arg Cys Leu Phe Ile Phe
 35 40 45
 Ile Val Ser Ile Ser Phe Lys Asn Leu His Glu Glu Ser Ile Cys Phe
 50 55 60
 Cys Leu Lys Glu Asn Ser Pro Gly Phe Glu Leu Asn Ser Ala Leu Ala
 65 70 75 80
 Arg Leu Tyr Pro Phe Pro Lys Glu Lys Ser Lys Val Ser Thr Tyr Ser
 85 90 95
 Lys Arg Met Ser Pro Gly Phe Ser Ile Leu Glu Ser Leu Ile Ser Pro
 100 105 110
 Thr Ile Leu Glu Arg Ser Lys
 115

<210> 3820

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3820

Met Asn Thr Ala Asn Ser Leu Cys Leu Gly Gly Thr Pro Ala Ser Ala
 1 5 10 15
 Ser Ser Ser Ser Ser Arg Ala Ala Pro Leu Val Thr Ser Gly Lys Ala
 20 25 30
 Pro Pro Asn Leu Pro Gln Gly Val Pro Pro Leu Leu His Asn Gln Tyr
 35 40 45
 Leu Val Gly Pro Gly Gly Leu Leu Pro Ala Tyr Pro Ile Tyr Gly Tyr
 50 55 60
 Asp Glu Leu Gln Met Leu Gln Ser Arg Leu Pro Val Asp Tyr Tyr Gly
 65 70 75 80
 Ile Pro Phe Ala Ala Pro Thr Ala Leu Ala Ser Arg Asp Gly Ser Leu
 85 90 95
 Ala Asn Asn Pro Tyr Pro Gly Asp Val Thr Lys Phe Gly Arg Gly Asp
 100 105 110
 Ser Ala Ser Pro Ala Pro Ala Thr Thr Pro Ala Gln Pro Gln Gln Ser
 115 120 125
 Gln Ser Gln Thr His His Thr Ala Gln Gln Pro Phe Val Asn Pro Ala
 130 135 140
 Leu Pro Pro Gly Tyr Ser Tyr Thr Gly Leu Pro Tyr Tyr Thr Gly Met
 145 150 155 160
 Pro Ser Ala Phe Gln Tyr Gly Pro Thr Met Phe Val Pro Pro Ala Ser
 165 170 175
 Ala Lys Gln His Gly Val Asn Leu Ser Thr Pro Thr Pro Pro Phe Gln
 180 185 190
 Gln Ala Ser Gly Tyr Gly Gln His Gly Tyr Ser Thr Gly Tyr Asp Asp
 195 200 205
 Leu Thr Gln Gly Thr Ala Ala Gly Asp Tyr Ser Lys Gly Gly Tyr Ala
 210 215 220
 Gly Ser Ser Gln Ala Pro Asn Lys Ser Ala Gly Ser Gly Pro Gly Lys
 225 230 235 240
 Gly Val Ser Val Ser Ser Ser Thr Thr Gly Leu Pro Asp Met Thr Gly
 245 250 255
 Ser Val Tyr Asn Lys Thr Gln Thr Phe Asp Lys Gln Gly Phe His Ala
 260 265 270
 Gly Thr Pro Pro Pro Phe Ser Leu Pro Ser Val Leu Gly Ser Thr Gly
 275 280 285

Pro Leu Ala Ser Gly Ala Ala Pro Gly Tyr Ala Pro Pro Pro Phe Leu
 290 295 300
 His Ile Leu Pro Ala His Gln Gln Pro His Ser Gln Leu Leu His His
 305 310 315 320
 His Leu Pro Gln Asp Ala Gln Ser Gly Ser Gly Gln Arg Ser Gln Pro
 325 330 335
 Ser Ser Leu Gln Pro Lys Ser Gln Ala Ser Lys Pro Ala Tyr Gly Asn
 340 345 350
 Ser Pro Tyr Trp Thr Asn
 355

<210> 3821

<211> 1255

<212> PRT

<213> Homo sapiens

<400> 3821

Met Gly Pro Lys His Val Leu Arg Gln Pro Gly Pro Ser Glu Arg His
 1 5 10 15
 His Pro Glu Val Pro Ala Trp Thr Pro Arg Ala Gly Pro Pro Cys Trp
 20 25 30
 Leu Cys Arg Gln Arg Trp Gly Trp Thr Leu His Pro Pro Gly Arg Gly
 35 40 45
 Cys Pro Ala Leu Leu Leu Ser Glu Pro Arg Met Ala Ala Gln Val Thr
 50 55 60
 Leu Glu Asp Ala Leu Ser Asn Val Asp Leu Leu Glu Glu Leu Pro Leu
 65 70 75 80
 Pro Asp Gln Gln Pro Cys Ile Glu Pro Pro Pro Ser Ser Leu Leu Tyr
 85 90 95
 Gln Asn Glu Met Leu Glu Glu Gly Gln Glu Tyr Ala Val Met Leu Tyr
 100 105 110
 Thr Trp Arg Ser Cys Ser Arg Ala Ile Pro Gln Val Arg Cys Asn Glu
 115 120 125
 Gln Pro Asn Arg Val Glu Ile Tyr Glu Lys Thr Val Glu Val Leu Glu
 130 135 140

Pro Glu Val Thr Lys Leu Met Asn Phe Met Tyr Phe Gln Arg Asn Ala
 145 150 155 160
 Ile Glu Arg Phe Cys Gly Glu Val Arg Arg Leu Cys His Ala Glu Arg
 165 170 175
 Arg Lys Asp Phe Val Ser Glu Ala Tyr Leu Ile Thr Leu Gly Lys Phe
 180 185 190
 Ile Asn Met Phe Ala Val Leu Asp Glu Leu Lys Asn Met Lys Cys Ser
 195 200 205
 Val Lys Asn Asp His Ser Ala Tyr Lys Arg Ala Ala Gln Phe Leu Arg
 210 215 220
 Lys Met Ala Asp Pro Gln Ser Ile Gln Glu Ser Gln Asn Leu Ser Met
 225 230 235 240
 Phe Leu Ala Asn His Asn Lys Ile Thr Gln Ser Leu Gln Gln Gln Leu
 245 250 255
 Glu Val Ile Ser Gly Tyr Glu Glu Leu Leu Ala Asp Ile Val Asn Leu
 260 265 270
 Cys Val Asp Tyr Tyr Glu Asn Arg Met Tyr Leu Thr Pro Ser Glu Lys
 275 280 285
 His Met Leu Leu Lys Val Met Gly Phe Gly Leu Tyr Leu Met Asp Gly
 290 295 300
 Ser Val Ser Asn Ile Tyr Lys Leu Asp Ala Lys Lys Arg Ile Asn Leu
 305 310 315 320
 Ser Lys Ile Asp Lys Tyr Phe Lys Gln Leu Gln Val Val Pro Leu Phe
 325 330 335
 Gly Asp Met Gln Ile Glu Leu Ala Arg Tyr Ile Lys Thr Ser Ala His
 340 345 350
 Tyr Glu Glu Asn Lys Ser Arg Trp Thr Cys Thr Ser Ser Gly Ser Ser
 355 360 365
 Pro Gln Tyr Asn Ile Cys Glu Gln Met Ile Gln Ile Arg Glu Asp His
 370 375 380
 Met Arg Phe Ile Ser Glu Leu Ala Arg Tyr Ser Asn Ser Glu Val Val
 385 390 395 400
 Thr Gly Ser Gly Arg Gln Glu Ala Gln Lys Thr Asp Ala Glu Tyr Arg
 405 410 415
 Lys Leu Phe Asp Leu Ala Leu Gln Gly Leu Gln Leu Leu Ser Gln Trp
 420 425 430

Ser Ala His Val Met Glu Val Tyr Ser Trp Lys Leu Val His Pro Thr
 435 440 445
 Asp Lys Tyr Ser Asn Lys Asp Cys Pro Asp Ser Ala Glu Glu Tyr Glu
 450 455 460
 Arg Ala Thr Arg Tyr Asn Tyr Thr Ser Glu Glu Lys Phe Ala Leu Val
 465 470 475 480
 Glu Val Ile Ala Met Ile Lys Gly Leu Gln Val Leu Met Gly Arg Met
 485 490 495
 Glu Ser Val Phe Asn His Ala Ile Arg His Thr Val Tyr Ala Ala Leu
 500 505 510
 Gln Asp Phe Ser Gln Val Thr Leu Arg Glu Pro Leu Arg Gln Ala Ile
 515 520 525
 Lys Lys Lys Lys Asn Val Ile Gln Ser Val Leu Gln Ala Ile Arg Lys
 530 535 540
 Thr Val Cys Asp Trp Glu Thr Gly His Glu Pro Phe Asn Asp Pro Ala
 545 550 555 560
 Leu Arg Gly Glu Lys Asp Pro Lys Ser Gly Phe Asp Ile Lys Val Pro
 565 570 575
 Arg Arg Ala Val Gly Pro Ser Ser Thr Gln Leu Tyr Met Val Arg Thr
 580 585 590
 Met Leu Glu Ser Leu Ile Ala Asp Lys Ser Gly Ser Lys Lys Thr Leu
 595 600 605
 Arg Ser Ser Leu Glu Gly Pro Thr Ile Leu Asp Ile Glu Lys Phe His
 610 615 620
 Arg Glu Ser Phe Phe Tyr Thr His Leu Ile Asn Phe Ser Glu Thr Leu
 625 630 635 640
 Gln Gln Cys Cys Asp Leu Ser Gln Leu Trp Phe Arg Glu Phe Phe Leu
 645 650 655
 Glu Leu Thr Met Gly Arg Arg Ile Gln Phe Pro Ile Glu Met Ser Met
 660 665 670
 Pro Trp Ile Leu Thr Asp His Ile Leu Glu Thr Lys Glu Ala Ser Met
 675 680 685
 Met Glu Tyr Val Leu Tyr Ser Leu Asp Leu Tyr Asn Asp Ser Ala His
 690 695 700
 Tyr Ala Leu Thr Arg Phe Asn Lys Gln Phe Leu Tyr Asp Glu Ile Glu
 705 710 715 720

Ala Glu Val Asn Leu Cys Phe Asp Gln Phe Val Tyr Lys Leu Ala Asp			
725	730	735	
Gln Ile Phe Ala Tyr Tyr Lys Val Met Ala Gly Ser Leu Leu Leu Asp			
740	745	750	
Lys Arg Leu Arg Ser Glu Cys Lys Asn Gln Gly Ala Thr Ile His Leu			
755	760	765	
Pro Pro Ser Asn Arg Tyr Glu Thr Leu Leu Lys Gln Arg His Val Gln			
770	775	780	
Leu Leu Gly Arg Ser Ile Asp Leu Asn Arg Leu Ile Thr Gln Arg Val			
785	790	795	800
Ser Ala Ala Met Tyr Lys Ser Leu Glu Leu Ala Ile Gly Arg Phe Glu			
805	810	815	
Ser Glu Asp Leu Thr Ser Ile Val Glu Leu Asp Gly Leu Leu Glu Ile			
820	825	830	
Asn Arg Met Thr His Lys Leu Leu Ser Arg Tyr Leu Thr Leu Asp Gly			
835	840	845	
Phe Asp Ala Met Phe Arg Glu Ala Asn His Asn Val Ser Ala Pro Tyr			
850	855	860	
Gly Arg Ile Thr Leu His Val Phe Trp Glu Leu Asn Tyr Asp Phe Leu			
865	870	875	880
Pro Asn Tyr Cys Tyr Asn Gly Ser Thr Asn Arg Phe Val Arg Thr Val			
885	890	895	
Leu Pro Phe Ser Gln Glu Phe Gln Arg Asp Lys Gln Pro Asn Ala Gln			
900	905	910	
Pro Gln Tyr Leu His Gly Ser Lys Ala Leu Asn Leu Ala Tyr Ser Ser			
915	920	925	
Ile Tyr Gly Ser Tyr Arg Asn Phe Val Gly Pro Pro His Phe Gln Val			
930	935	940	
Ile Cys Arg Leu Leu Gly Tyr Gln Gly Ile Ala Val Val Met Glu Glu			
945	950	955	960
Leu Leu Lys Val Val Lys Ser Leu Leu Gln Gly Thr Ile Leu Gln Tyr			
965	970	975	
Val Lys Thr Leu Met Glu Val Met Pro Lys Ile Cys Arg Leu Pro Arg			
980	985	990	
His Glu Tyr Gly Ser Pro Gly Ile Leu Glu Phe Phe His His Gln Leu			
995	1000	1005	

Lys Asp Ile Val Glu Tyr Ala Glu Leu Lys Thr Val Arg Phe Gln Asn
 1010 1015 1020
 Leu His Ala Ala Pro Phe Gln Asn Ile Leu Pro Arg Val His Val Lys
 1025 1030 1035 1040
 Glu Gly Glu Arg Leu Asp Ala Lys Met Lys Arg Leu Glu Ser Lys Tyr
 1045 1050 1055
 Ala Pro Leu His Leu Val Pro Leu Ile Glu Arg Leu Gly Thr Pro Gln
 1060 1065 1070
 Gln Ile Ala Ile Ala Arg Glu Gly Asp Leu Leu Thr Lys Glu Arg Leu
 1075 1080 1085
 Cys Cys Gly Leu Ser Met Phe Glu Val Ile Leu Thr Arg Ile Arg Ser
 1090 1095 1100
 Phe Leu Asp Asp Pro Ile Trp Arg Gly Pro Leu Pro Ser Asn Gly Val
 1105 1110 1115 1120
 Met His Val Asp Glu Cys Val Glu Phe His Arg Leu Trp Ser Ala Met
 1125 1130 1135
 Gln Phe Val Tyr Cys Ile Pro Val Gly Thr His Glu Phe Thr Val Glu
 1140 1145 1150
 Gln Cys Phe Gly Asp Gly Leu His Trp Ala Gly Cys Met Ile Ile Val
 1155 1160 1165
 Leu Leu Gly Gln Gln Arg Arg Phe Ala Val Leu Asp Phe Cys Tyr His
 1170 1175 1180
 Leu Leu Lys Val Gln Lys His Asp Gly Lys Asp Glu Ile Ile Lys Asn
 1185 1190 1195 1200
 Val Pro Leu Lys Lys Met Val Glu Arg Ile Arg Lys Phe Gln Ile Leu
 1205 1210 1215
 Asn Asp Glu Ile Ile Thr Ile Leu Asp Lys Tyr Leu Lys Ser Gly Asp
 1220 1225 1230
 Gly Glu Gly Thr Pro Val Glu His Val Arg Cys Phe Gln Pro Pro Ile
 1235 1240 1245
 His Gln Ser Leu Ala Ser Ser
 1250 1255

<210> 3822

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3822

Met Gly Pro Leu Trp Tyr Thr Gln Ser Ile Thr Asp Arg Asn Met Thr
 1 5 10 15
 Glu Met Phe Pro Lys His Thr Gly Cys Ser Val Gly Ser Ala Ala Ala
 20 25 30
 Pro Ala Thr Leu Glu Thr Leu Val Ala Leu Gly Thr Thr Arg Ser His
 35 40 45
 Ala Arg Pro Pro Leu Cys Gln Glu Ser Gln His Thr Glu Glu Leu Ala
 50 55 60
 Ile Arg His Gln His Gln Ala Pro Ala Leu His Val Gly Leu Ser Asp
 65 70 75 80
 Pro Asp Val Thr Glu Asn Pro Ser Asp Pro Ala Ser Gly Ala Ala Cys
 85 90 95
 Thr Cys Phe Leu His Asn Ser Pro Gln Ala Ala Leu Pro Gly Ala Gly
 100 105 110
 Lys His Cys Pro Ser Gly Val Ala Asn Ser Arg Leu Cys Leu Ser Gln
 115 120 125
 Asn His Tyr Ser Asp His Pro Asp Ala Asn Pro Arg Tyr Ile Ile His
 130 135 140

 Leu Ser Asp Pro Phe Cys Leu His Leu Trp Ser Thr Ala His Gln Val
 145 150 155 160
 Glu Ser Ser Glu Met Thr
 165

<210> 3823

<211> 679

<212> PRT

<213> Homo sapiens

<400> 3823

Met Leu Ser Met Glu Asn Val Gly Asn Tyr Gln Gly Tyr Ser Gln Glu

1	5	10	15
Thr Ala Pro Lys Asp His Leu Leu His Asp Pro Glu Thr Ser Ser Asp			
20	25	30	
Glu Asp Leu Arg Ser Asn Ser Glu Arg Asp Leu Glu Thr His Met Met			
35	40	45	
His Leu Ser Gly Asn Asp Ser Gly Val Arg Leu Gly Gln Lys Gln Leu			
50	55	60	
Glu Asn Ala Leu Thr Val Arg Leu Ser Lys Lys Phe Glu Lys Ile Asn			
65	70	75	80
Glu Gly Arg Met Pro Gly Thr Val His Ser Ser Trp His Ser Val Lys			
85	90	95	
Gln Thr Met Ser Leu Pro Glu Lys Ser Gln Ser Gln Ile Lys His Gln			
100	105	110	
Asn Leu Val Ala Leu Val Ser Glu Asp His Cys Val Asp Thr Ser Gln			
115	120	125	
Glu Ile Ser Phe Leu Gly Ser Asn Lys Gln Lys Met Leu Glu Ala His			
130	135	140	
Ile Lys Thr Phe Arg Met Arg Met Leu Trp Gly Leu Pro Cys Lys Val			
145	150	155	160
Leu Glu Ser Ile Glu Ile Phe Lys Ser Glu Glu Asp Ile Ser Asn Ser			
165	170	175	
Phe Ser His Phe Tyr Leu Pro Ser Ser Ala Ser Phe Ile Ser Gln Gly			
180	185	190	
Asp Ser Lys Asp Gly Val Ser Lys Ser Cys Arg Arg Ser Thr Phe Gln			
195	200	205	
Gly Glu Lys Leu Gly Thr Thr Ser Ser Val Pro Val Leu Asn His Pro			
210	215	220	
Gln Pro Val Ser Ser Pro Ile Gly Lys Glu Gly Gln Gly Thr Leu Arg			
225	230	235	240
Arg Gln Phe Ser Asp Ile Asp His Asp Leu Ile Glu Thr Asp Ala Lys			
245	250	255	
Asp Gly Ala Ser Thr Pro Leu Arg Arg Gly Thr Thr Tyr Phe Gln Gly			
260	265	270	
Glu Lys Leu Glu Thr Thr Ser Ser Phe Ser Ile Leu Gly His Pro His			
275	280	285	

Leu Val Thr Ser Pro Val Asp Gln Glu Lys Gln Gly Thr Leu Arg Arg
 290 295 300
 Glu Phe Ala Asp Thr Asp Glu Asp Leu Thr Glu Ser Val Trp Thr Thr
 305 310 315 320
 Glu Asp Gly Arg Gln Thr Phe Leu Pro Pro Thr Tyr Ser Ile Ile Asp
 325 330 335
 Glu Val Ser Gln Lys Gln Thr Ile Leu Ala Ser Arg Cys Ser Ala Glu
 340 345 350
 Leu Pro Ile Leu Gln Ala Gly Val Gly Arg Asp Ser Arg Asp Lys Arg
 355 360 365
 Glu Ser Ala Ser Asn Asn Val Asn Arg Leu Gln Gly Ser Gly Lys Thr
 370 375 380
 Phe Pro Val Thr Asn Gly Ser Lys Glu Met Phe Lys Glu Glu Glu Ile
 385 390 395 400
 Cys Thr Leu Gln Ser Gln Thr Arg Asn Asn Leu Thr Thr Ser Lys Ser
 405 410 415
 Gly Ser Cys Leu Val Thr Asn Val Lys Arg Ser Thr Ser His Glu Thr
 420 425 430
 Glu Ile Phe Pro Pro Arg Ile Ser Val Pro Gln Thr Pro Lys Ser Ser
 435 440 445
 Tyr Leu Lys Asn Gln Met Leu Ser Gln Leu Lys Leu Val Gln Arg Lys
 450 455 460
 His Ser Gln Pro Gln Ser His Phe Thr Gly Met Ser Leu Ala Leu Asp
 465 470 475 480
 Asn Leu Ser Ser Lys Asp Leu Leu Thr His Ala Gln Gly Ile Ser Asn
 485 490 495
 Gln Asp Leu Gly Thr Ser Gln Val Leu His Val His Leu Glu Val Arg
 500 505 510
 Gly Ile Arg Val Ala Gln Gln Gln Glu His Arg Val Pro Thr His Val
 515 520 525
 Leu Gln Lys Cys Gln Val Lys Asn Phe Ser Pro Ala Ala Lys Arg Val
 530 535 540
 Ser Pro Leu Arg Pro Asn Gly Gly Glu Leu Gly Gly Gly Asp Ala Gly
 545 550 555 560
 Leu Gly Thr Ser Gln Leu Thr Arg Lys Ser Leu Pro Val His Asn Lys
 565 570 575

Ala Ser Gly Glu Val Pro Gly Ser Lys Ser Ser Pro Thr Leu Lys Thr
580 585 590
Gln Pro Pro Ser Glu Asn Leu Phe Arg Lys Trp Met Gln Thr Leu Leu
595 600 605
Gln Trp Phe Asn Lys Pro Ser Ile Met Cys Glu Glu Gln Glu Ser Ser
610 615 620
Trp Glu Lys Gly Ser Ser Leu Ser Ser Ser Val Gln Asn Arg Ser Arg
625 630 635 640
Val Thr Ser Arg Ala Ala Phe Thr Gly Ala Thr Glu Ala Gln Lys Ile
645 650 655
Arg Lys Asp Thr Gly Glu Phe Leu Glu Glu Lys Leu Gly His Ser His
660 665 670
Gly Ile Asp Ile Thr Cys Pro
675

<210> 3824

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3824

Met Thr Thr Lys Thr Met Ser Gln Tyr Cys Gln Gln Leu Asn Gly Leu
1 5 10 15
Lys Ala Glu Asn Thr Arg Leu Asn Ser Lys Leu Glu Lys Glu Glu His
20 25 30
His Thr Asp Gly Leu Glu Ala Glu Val Glu Phe Phe His Ser Arg Leu
35 40 45
Ala Ala Ala Ile Asn Glu His Asn Glu Ser Leu Glu Thr Lys Asp Leu
50 55 60
Glu Leu Val Leu Gln Arg Ala His Asn Phe Ser Val His Lys Lys Ile
65 70 75 80
Ser Ser Thr Val Ser Gln Leu Lys Asp Lys Asn Glu Leu Leu Thr Glu
85 90 95
Gln Phe Ser Lys Ala Gln Met Lys Phe Asn Thr Leu Lys Gly Lys Leu
100 105 110

His Glu Ile Arg Asp Ala Leu Arg Glu Lys Thr Leu Ala Leu Glu Ser
 115 120 125
 Val Gln Met Asp Gln Arg Gln Ala Gln His Arg Ile Lys Glu Met Glu
 130 135 140
 Gln Ile His Pro Asn Glu Glu Thr Lys Gly Val Asp Pro Pro Glu Ser
 145 150 155 160
 Thr Thr Val

<210> 3825

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3825

Met Gln Ala Pro Phe Gly Ala Arg Asn Ala Arg Glu Ile Cys Leu Thr
 1 5 10 15
 Lys Arg Glu Pro Gly Gly Asn Ile Gln Asp Asn Gly Lys Lys Ala Ser
 20 25 30
 Lys Ile Phe Gln Lys Ser Leu Gly Gln Pro Phe Pro Ser Gln Ala Gln
 35 40 45
 Arg Pro Lys Ser Lys Glu Trp Phe Gln Gly Pro Gly Leu Glu His His
 50 55 60
 Cys Pro Val Gln Pro Trp Asp Ala Ala Pro Cys Ile Gln Thr Ala Thr
 65 70 75 80
 Ala Pro Ala Leu Ala Gln Arg Ala Ser Asp Thr Ala Trp Ala Thr Ala
 85 90 95
 Ser Lys Gly Ala Ser Cys Lys Pro Trp Trp Phe Pro Cys Gly Val Lys
 100 105 110
 Pro Lys Gly Ala Gln Asn Glu Ser Met Lys Glu Ala Trp Gln Leu Pro
 115 120 125
 Pro Arg Phe Gln Arg Leu Tyr Arg Lys Thr Cys Leu Leu Arg Gln Lys
 130 135 140
 Pro Ala Ala Gly Val Val Pro Leu

145

150

<210> 3826

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3826

Met Asp Met Asp Phe Pro Asn Thr His Ala Gln Ser Gln Val Ser Pro

1

5

10

15

Arg Gln Pro Met Arg Met Ala Leu Gly Ser Leu Asp Phe Ser Ser Asp

20

25

30

Gly Arg Ala Leu Asn Pro Lys Val Leu Val Gly Gln Val Gly Gly Phe

35

40

45

Leu Val Arg Thr Arg Gly Gly Thr Ser Thr Gly Met Gly Asp Ala Gly

50

55

60

Ser Arg Cys Pro Ser Asp Ala Val Val Arg Thr Leu Leu Thr Gln Leu

65

70

75

80

Gln Arg Arg Ala Arg Gly Thr Leu Ala His Asp Ala Pro Val Met Pro

85

90

95

Trp Leu Gly Arg Arg Ser Arg Ser Cys Ser Ala Glu His Gly Gly Arg

100

105

110

Trp Leu Thr Met Pro Gln

115

<210> 3827

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3827

Met Asp Gly Val Asp Ala Arg Val Ser Arg Arg Arg Gly Trp His Pro

1

5

10

15

His Glu Ala Ser His Thr Pro Met Gly Val Gly Ile Trp Arg His Ala

20 25 30
 Trp Gly Gly Asp Ala Leu Trp Arg His Lys Ala Gly Ala Ser Arg Ala
 35 40 45
 Pro Arg Ser Trp Thr Gly Pro Gln Gly Val Leu Gln Leu Lys Arg Glu
 50 55 60
 Gly Lys Lys Ala His Glu Pro Val Ala Ser Gly Ala Asp Phe Pro Thr
 65 70 75 80
 Gln Gly Leu Ser Leu Cys Pro Trp Gly Pro Arg Asn Phe Pro Gly Asn
 85 90 95
 Leu His Leu Ala Gln Ile Tyr Pro Leu Ser Pro Pro Thr Leu Ala Val
 100 105 110
 Ala Ser Gln Glu Ala Pro Ala Thr Val Leu Lys Thr Lys Phe Ser Ser
 115 120 125
 Val Ile Pro Leu Cys Ser Ala Cys Val Ile His Glu Thr Gly Lys Ser
 130 135 140
 Pro Gly Leu Gln Arg Lys Lys
 145 150

<210> 3828

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3828

Met Ala Thr Ala Ser Ala Phe Ser Val Arg Glu Pro Arg Ala Gln Pro
 1 5 10 15
 Asn Pro Ala Gly Gly Asn Ser Trp Val Pro Phe Pro Tyr Phe Arg Ser
 20 25 30
 Leu Gly Cys Ala Val Val Thr Ser Glu Pro Gly Cys Val Leu Thr Ser
 35 40 45
 Asp Lys Cys Leu Ser Leu Gly His Glu Arg Gly Val Gly Ser Ala Val
 50 55 60
 Gln Phe Gln Gly Gly Phe Trp Leu Ile Thr Phe Ser Trp Val Phe Ala
 65 70 75 80
 Glu Ser Gly Gly Asn Leu Cys Pro Pro Glu Thr Arg Asp Gln Gly Arg

85 90 95
 Ser Tyr Gly Arg Gly Asp Ala Ala Arg Ala Val Ala Ser Ser Ala Ser
 100 105 110
 Ser Val Arg Val Arg Ser Arg Leu Ala Pro Gly Pro Pro Gly Ala Gln
 115 120 125
 Gly Leu Glu
 130

<210> 3829

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3829

Met Ala Asn Tyr Tyr Glu Val Leu Gly Val Gln Ala Ser Ala Ser Pro
 1 5 10 15
 Glu Asp Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Arg Trp His Pro
 20 25 30
 Asp Lys Asn Pro Asp Asn Lys Glu Glu Ala Glu Lys Lys Phe Lys Leu
 35 40 45
 Val Ser Glu Ala Tyr Glu Val Leu Ser Asp Ser Lys Lys Arg Ser Leu
 50 55 60
 Tyr Asp Arg Ala Gly Cys Asp Ser Trp Arg Ala Gly Gly Gly Ala Ser
 65 70 75 80
 Thr Pro Tyr His Ser Pro Phe Asp Thr Gly Tyr Thr Phe Arg Asn Pro
 85 90 95
 Glu Asp Ile Phe Arg Glu Phe Phe Gly Gly Leu Asp Pro Phe Ser Phe
 100 105 110
 Glu Phe Trp Asp Ser Pro Phe Asn Ser Asp Arg Gly Gly Arg Gly His
 115 120 125
 Gly Leu Arg Gly Ala Phe Ser Ala Gly Phe Gly Glu Phe Pro Ala Phe
 130 135 140
 Met Glu Ala Phe Ser Ser Phe Asn Met Leu Gly Cys Ser Gly Gly Ser
 145 150 155 160
 His Thr Thr Phe Ser Ser Thr Ser Phe Gly Gly Ser Ser Ser Gly Ser

165 170 175
 Ser Gly Phe Lys Ser Val Met Ser Ser Thr Glu Met Ile Asn Gly His
 180 185 190
 Lys Val Thr Thr Lys Arg Ile Val Glu Asn Gly Gln Glu Arg Val Glu
 195 200 205
 Val Glu Glu Asp Gly Gln Leu Lys Ser Val Thr Val Asn Gly Lys Glu
 210 215 220
 Gln Leu Lys Trp Met Asp Ser Lys
 225 230

<210> 3830

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3830

Met Ser Ile His Arg Ile Cys Arg His Pro Ser Lys Glu Ser Cys Thr
 1 5 10 15
 Ala Tyr Ser Thr Asp Ile Leu Thr Lys Ala Ser Pro Ser Cys Leu Gly
 20 25 30
 Gly Val Gly Leu Phe Pro Tyr Ile Leu Ser Ser Leu Glu Thr Arg Gln
 35 40 45
 Val Asn Gln Leu Gly Val Lys Trp Pro Ser Ala Met Ser Ser Pro Gly
 50 55 60
 Glu Ser Ile Pro Leu Leu Pro Leu Phe Pro Cys Asn Trp Asn Trp Thr
 65 70 75 80
 Thr Trp Cys Pro Arg Leu Ser Gly Val Lys Leu Pro Leu Gly Val Ser
 85 90 95
 Cys Ser Ser Val Thr Phe Ile Phe Ala Phe Leu Met Ser Pro Leu Ala
 100 105 110
 Val Leu Ile Leu Leu Leu Gln
 115

<210> 3831

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3831

Met Gly Glu Asp Phe Met Thr Lys Thr Pro Lys Ala Met Ala Thr Lys
 1 5 10 15
 Ala Lys Ile Asp Lys Trp His Leu Ile Lys Leu Lys Ser Phe Cys Thr
 20 25 30
 Ala Lys Glu Thr Thr Ile Arg Met Asn Arg Gln Pro Thr Glu Trp Glu
 35 40 45
 Lys Ile Phe Ala Ile Tyr Pro Ser Asp Lys Gly Leu Ile Ser Arg Ile
 50 55 60
 Cys Lys Glu Leu Lys Gln Ile Tyr Lys Ile Lys Ser Asn Asn Ser Ile
 65 70 75 80
 Asn Lys Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile
 85 90 95
 Tyr Ala Ala Lys Arg His Met Lys Glu Cys Ser Ser Ser Leu Ala Ile
 100 105 110
 Arg Glu Met Gln Ile Lys Thr Thr Val Arg Tyr Tyr Leu Thr Pro Val
 115 120 125
 Arg Met Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Cys Trp Lys Gly
 130 135 140
 Tyr Gly Glu Ile Gly Thr Leu Leu His Cys Trp Trp Asp Cys Lys Leu
 145 150 155 160
 Val Gln Pro Leu Trp Lys Thr Val Trp Arg Phe Leu Lys Asp Leu Glu
 165 170 175
 Leu Glu Ile Pro Phe Asp Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro
 180 185 190
 Lys Asp Tyr Lys Ser Cys Cys Tyr Lys Asp Thr Cys Thr Arg Lys Phe
 195 200 205
 Ile Leu Ala Leu Leu Thr Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys
 210 215 220
 Pro Ser Met Ile Asp Trp Ile Lys Lys Met Trp His Met Tyr Thr Ile
 225 230 235 240
 Glu Tyr Tyr Ala Ala Ile Lys Arg Met Ser Ser Cys Pro Leu

245

250

<210> 3832

<211> 1014

<212> PRT

<213> Homo sapiens

<400> 3832

Met Pro Asn Pro Pro Leu Tyr Tyr Gln Pro Gly Asn Asp Gln Pro Val
 1 5 10 15
 Ser Phe Asn Leu Lys Asn Thr Ser Gln Val Ser Leu His Arg Ser Glu
 20 25 30
 Thr Ile Ser Leu Gln Thr Trp Cys Ser Cys Val Ala Gly Gln Pro Ile
 35 40 45
 Gln Thr Phe Trp Val Ser Glu Trp Ser Thr Met Asn Pro Glu Gln Arg
 50 55 60
 His His Cys Gln Gln Thr Pro Asn Pro Met Ala Leu Ala Leu Pro Ser
 65 70 75 80
 Pro Ala Leu Lys Ala Leu Ser Gly Pro His Pro Gln Ser Gly Gly Gln
 85 90 95
 Asp Asn Asp Ser Gly Ser Asp Leu Gln Gln Lys Tyr Ser Gln Leu Phe
 100 105 110
 Cys Gly Leu Pro Ser Leu His Ser Glu Ser Leu Val Ala Thr Phe Met
 115 120 125
 Gly Ser Gln Gly Leu Pro Lys Ile Glu Asn Val Pro Lys Pro Pro Leu
 130 135 140
 Lys Asp Pro Phe Leu Phe Asn Glu Leu Ser Phe Pro Gln Leu Leu Pro
 145 150 155 160
 Lys Thr Ser Pro Gln Ser Ala Pro Pro Ser Ser Pro Leu Ser Pro Asn
 165 170 175
 Trp Val Ser Pro Ser Asp His Gln Arg Ala Gln Ile Asn Val Pro Phe
 180 185 190
 Leu Thr Leu Ala Glu Tyr Glu Ala Leu Glu Trp His Leu Leu Gln Arg
 195 200 205
 Gln Leu Gln Leu Gln Trp Gly Trp Pro Ala Ala Leu Gln Arg Ser Gln

210	215	220	
His Thr Gln Cys Leu	Met Gln His Glu Pro Cys Gly Lys Ala Gln Ser		
225	230	235	240
Pro Glu Thr Thr Thr	Ala Ser Gln Thr Gly Lys Ser Ile Ser Val Leu		
	245	250	255
Thr Arg Glu Leu Leu Phe Phe	Pro Glu His Ala Arg Lys Leu Leu Glu		
	260	265	270
Phe His Ile Gln Lys Gln Ser Ile	His His Arg Trp Gly Leu Pro Gln		
	275	280	285
Lys Ile Gln Gln Ser Ile Gln Leu Leu Leu Thr	Ser Thr Asp Gln Gln		
	290	295	300
Thr Val Ser Ser Ser Ser Thr	Ala Leu Ala Asn Val Ser Ile Pro Gln		
305	310	315	320
Pro Val Ala Leu Glu Ala Asn Gly Ala Cys Asp Val Leu Ser Pro Ile			
	325	330	335
Ala Ala Pro Val Ser Ile Pro Arg Pro His Leu Leu Thr Gln Val Lys			
	340	345	350
Ala Ile Leu Gln Ser His Ile Asp Ser Lys Cys Gly Gln Ile His Gln			
	355	360	365
Gly Lys Ile Pro Ala Cys Val His Arg Ser Trp Asp Cys Arg Ile Ser			
	370	375	380
Gly Val Leu Ala Val Ala Pro Phe Pro Cys Ile Pro Glu Ser Gln Phe			
385	390	395	400
Leu Glu Leu Gln Thr Ala Ser Asp Pro Asp Leu His His Lys Val Met			
	405	410	415
Pro Trp Met Pro Thr Ala Leu Asp Gln Gln Gln Gln Ala Leu Pro Gly			
	420	425	430
Thr Val Thr Glu His Pro Lys Leu Leu Arg Val Leu Ser Val Glu Ala			
	435	440	445
Ile Glu Lys Leu Glu Thr Thr Leu Arg His Lys His Leu Ala Phe Leu			
	450	455	460
Ser Gly Leu Pro Ala Leu Tyr Tyr Val Ala Leu Pro Arg Ala Leu Ala			
465	470	475	480
Pro Ala Val Thr Ser Gln Ser Val Ile Thr Glu Met Val Pro Ser Pro			
	485	490	495
Val Glu Ile Pro Ala Glu Pro Leu Ile Gln Met Val Ser Phe Glu Glu			

500	505	510
Gln Cys Ile Ser Leu Gly Pro Cys	Pro Gln Gly Asn Asn Glu Ser Cys	
515	520	525
Thr Asp Val Ala Lys Glu Phe Gln	Pro Ala Val Pro Val Lys Gly Thr	
530	535	540
Met Glu Thr Leu Pro Leu Glu Ser Gln	Thr His Pro Thr Ser Pro His	
545	550	555
Ser Leu Gln Thr His Ile Leu Thr Lys	Leu Asn Phe His Leu Arg Lys	
565	570	575
Lys Val Leu Glu Ile Gln Trp Gly Ile	Pro Ile Arg Ala Arg Lys Ser	
580	585	590
Arg Glu Gln Thr Val Ala Ala Pro Glu	Asn Ile Ser Thr Gln Lys Ser	
595	600	605
Leu Glu Ser Leu Asn His Gln Gly Glu	Thr Leu Leu Gln Glu Leu Pro	
610	615	620
Ile Pro Pro Asp Thr Leu Pro Ala Pro	Asn Pro Glu Gly Val His Leu	
625	630	635
Lys Glu Gln Leu Ala Asn Asp Leu Lys	Ala Val Gln Gln Asn Gln Lys	
645	650	655
Gln Ser Asn Ser Lys Ala Val Pro Gln	Gly Ser Ala His Ser Val Ser	
660	665	670
Lys Ile Ser Gln Pro Ile Gly Asp Met	Thr Glu Ala His Met Pro Cys	
675	680	685
Val Gln Val Glu Ala Asn Val Asn Lys	Pro Ser Leu Glu Glu Pro Cys	
690	695	700
Gly Pro Glu Pro Gln Ser Pro Ser Lys	Ser Lys Asp Pro Ala His Val	
705	710	715
Pro Met Leu Ala Glu Asn Arg Glu Asp	Pro Glu Glu Thr Lys Ala Ala	
725	730	735
Arg Asp Tyr Arg Glu Gly Asp Ala Gly	Phe Gly Arg Ser Ser Thr Arg	
740	745	750
Glu Glu Arg Arg Pro Ala Glu Asp Gln	Arg Pro Ala Gly Met Leu Pro	
755	760	765
Asn Lys Thr Pro Arg Gly Ser Trp Arg	Trp Ser His Ser Phe His Leu	
770	775	780

Ala Asp Pro Cys Gln His Ser Pro Gln His His Pro Gln Leu Lys Leu
 785 790 795 800
 Pro Gln Leu Pro Pro Arg Val Pro Gly Glu Lys Glu Ser Glu Lys Asp
 805 810 815
 Leu Gln Asp Ser Gln Thr Lys Leu Thr Val Ile Leu Glu Pro Ala Thr
 820 825 830
 Ile Pro Glu Asn Ala Gln Thr Val Leu Pro Gln Ser Ser Gln Gly Gln
 835 840 845
 Pro Phe Leu Ser Gln Pro Thr Gln Ala Lys Pro Leu Gln Gly Gln Thr
 850 855 860
 Leu Gln Gly Gln Val Leu His Gly Leu Val Met Pro Val His Ala Gln
 865 870 875 880
 Lys Lys Pro Ser Leu Thr Glu Ser Ser Phe Arg Asn Lys Ile Lys Cys
 885 890 895
 Phe Leu Gln His Ile Asn Pro Lys Thr Lys Gly Lys Gly His Glu Asp
 900 905 910
 Ser Met Phe Ser Ala Ala Ala Lys Val Ala Lys Thr Arg Lys Glu Asn
 915 920 925
 Val Ala Lys Ser Leu Ala Pro Ala Lys Ser Pro Val Gly Arg Ser Lys
 930 935 940
 Thr Glu Lys Pro Thr Gly Cys Ser Lys Ala Gln Ser Arg Pro Ala Gln
 945 950 955 960
 Lys Leu Val Gly Pro Ala Phe Leu Asp Gly Pro Gln Ser Leu Asp Asp
 965 970 975
 Lys Leu Arg Leu His Ser Arg Gln Pro Gly Ser Ala Ser Ala Leu Gly
 980 985 990
 Tyr Pro Arg His Cys Pro Arg His Cys Pro Arg Glu Ala Cys Ala Asn
 995 1000 1005
 Lys Pro Gly His Pro Thr
 1010

<210> 3833

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3833

Met Ala Ala Trp Thr Ala Ser His Trp Pro Val Lys Gly Ile Leu Lys
 1 5 10 15
 Asn Lys Thr Ser Thr Ala Ser Ser Met Val Ala Ser Ala Glu Gln Pro
 20 25 30
 Ser Gly Ser Val Glu Glu Glu Leu Ser Lys Lys Ser Gln Lys Trp Glu
 35 40 45
 Glu Met Asn Ile Leu Ala Thr Tyr His Pro Ala Asp Lys Asp Tyr Gly
 50 55 60
 Leu Met Lys Ile Val Glu Pro Ser Thr Pro Ser Cys Arg Lys Met Gly
 65 70 75 80
 Asp Gly Glu Asp Ala Cys Ser Gly Ile Glu Thr Thr Glu Ala Val Ala
 85 90 95
 Pro Asp Ile Leu Ala Lys Lys Leu Ala Val Ala Glu Gly Ser Asn Pro
 100 105 110
 Lys Tyr Arg Val Gln Glu Gln Glu Ser Ser Gly Glu Glu Ala Ser Asp
 115 120 125
 Leu Ser Pro Glu Glu Arg Glu Lys Arg Arg Gln Phe Gln Met Lys Arg
 130 135 140
 Lys Leu His Tyr Asn Glu Gly Leu Asn Ile Lys Leu Ala Arg Glu Leu
 145 150 155 160
 Ile

<210> 3834

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3834

Met Leu Val Ala Gln Gln Ala Tyr Ser Thr Leu Val Pro Met Pro Leu
 1 5 10 15
 Leu Val Ser Ser Ile Ser Glu Ile Gln Asn Gln Val Leu Glu Glu Ile
 20 25 30

Gln Asn Leu Asn Cys Val Lys Glu Asn Ser Ala Thr Phe Ile Glu Arg
 35 40 45
 Lys Leu Ser Phe Glu Lys Lys Lys Pro Val Gln Ile Leu Pro Glu Met
 50 55 60
 Pro His Gln Thr Asp Ile His Arg Ser Lys Leu Leu Ser Thr Tyr Ser
 65 70 75 80
 Ala Glu Glu Leu Tyr Gln Ala Lys Arg Lys Cys Asn Ala Thr Gln Glu
 85 90 95
 Tyr Asp Ile Asn Leu Leu Glu Gly Asp Leu Val Ala Val Ile Glu Gln
 100 105 110
 Lys Asp Pro Leu Gly Ser Thr Ser Arg Trp Leu Val Asp Thr Gly Asn
 115 120 125
 Val Lys Gly Tyr Val Tyr Ser Ser Phe Leu Lys Pro Tyr Asn Pro Ala
 130 135 140
 Lys Met Gln Lys Val Asp Ala Glu Asn Arg Phe Cys Asp Asp Asp Phe
 145 150 155 160
 Glu Asn Ile Ser Leu Phe Val Ser Ser Arg Pro Ala Ser Asp Ser Val
 165 170 175
 Thr Gly Thr Ser Glu Ser Ser Ile Gly Asp Ser Ser Ser Ser Leu Ser
 180 185 190
 Gly Thr Cys Gly Lys Phe Glu Thr Asn Gly Thr Asp Val Asp Ser Phe
 195 200 205
 Gln Glu Val Asp Glu Gln Ile Phe Tyr Ala Val His Ala Phe Gln Ala
 210 215 220
 Arg Ser Asp His Glu Leu Ser Leu Gln Glu Tyr Gln Arg Val His Ile
 225 230 235 240
 Leu Arg Phe Cys Asp Leu Ser Gly Asn Lys Glu Trp Trp Leu Ala Glu
 245 250 255
 Ala Gln Gly Gln Lys Gly Tyr Val Pro Ala Asn Tyr Leu Gly Lys Met
 260 265 270
 Thr Tyr Ala
 275

<210> 3835

<211> 1551

<212> PRT

<213> Homo sapiens

<400> 3835

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Met Ser Pro Ile Gly Asp Ala Phe Arg Asn Arg Leu Arg Met Phe Pro
  1             5             10             15
Ser Leu Ile Asn Cys Cys Thr Ile Asp Trp Phe Gln Ser Trp Pro Thr
      20             25             30
Asp Ala Leu Glu Leu Val Ala Asn Lys Phe Leu Glu Asp Val Glu Leu
      35             40             45
Asp Asp Asn Ile Arg Val Glu Val Val Ser Met Cys Lys Tyr Phe Gln
      50             55             60
Glu Ser Val Lys Lys Leu Ser Leu Asp Tyr Tyr Asn Lys Leu Arg Arg
      65             70             75             80
His Asn Tyr Val Thr Pro Thr Ser Tyr Leu Glu Leu Ile Leu Thr Phe
      85             90             95
Lys Thr Leu Leu Asn Ser Lys Arg Gln Glu Val Ala Met Met Arg Asp
      100            105            110
Arg Tyr Leu Thr Gly Leu Gln Lys Leu Asp Phe Ala Ala Ser Gln Val
      115            120            125
Ala Val Met Gln Arg Glu Leu Thr Ala Leu Gln Pro Gln Leu Ile Leu
      130            135            140
Thr Ser Glu Glu Thr Ala Lys Met Met Val Lys Ile Glu Ala Glu Thr
      145            150            155            160
Arg Glu Ala Asp Gly Lys Lys Leu Leu Val Gln Ala Asp Glu Lys Glu
      165            170            175
Ala Asn Val Ala Ala Ala Ile Ala Gln Gly Ile Lys Asn Glu Cys Glu
      180            185            190
Gly Asp Leu Ala Glu Ala Met Pro Ala Leu Glu Ala Ala Leu Ala Ala
      195            200            205
Leu Asp Thr Leu Asn Pro Ala Asp Ile Ser Leu Val Lys Ser Met Gln
      210            215            220

Asn Pro Pro Gly Pro Val Lys Leu Val Met Glu Ser Ile Cys Ile Met
      225            230            235            240
Lys Gly Met Lys Pro Glu Arg Lys Pro Asp Pro Ser Gly Ser Gly Lys

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	245	250	255
Met Ile Glu Asp Tyr Trp Gly Val Ser Lys Lys Ile Leu Gly Asp Leu			
	260	265	270
Lys Phe Leu Glu Ser Leu Lys Thr Tyr Asp Lys Asp Asn Ile Pro Pro			
	275	280	285
Leu Thr Met Lys Arg Ile Arg Glu Arg Phe Ile Asn His Pro Glu Phe			
	290	295	300
Gln Pro Ala Val Ile Lys Asn Val Ser Ser Ala Cys Glu Gly Leu Cys			
305	310	315	320
Lys Trp Val Arg Ala Met Glu Val Tyr Asp Arg Val Ala Lys Val Val			
	325	330	335
Ala Pro Lys Arg Glu Arg Leu Arg Glu Ala Glu Gly Lys Leu Ala Ala			
	340	345	350
Gln Met Gln Lys Leu Asn Gln Lys Arg Ala Glu Leu Lys Leu Val Val			
	355	360	365
Asp Arg Leu Gln Ala Leu Asn Asp Asp Phe Glu Glu Met Asn Thr Lys			
	370	375	380
Lys Lys Asp Leu Glu Glu Asn Ile Glu Ile Cys Ser Gln Lys Leu Val			
385	390	395	400
Arg Ala Glu Lys Leu Ile Ser Gly Leu Gly Gly Glu Lys Asp Arg Trp			
	405	410	415
Thr Glu Ala Ala Arg Gln Leu Gly Ile Arg Tyr Thr Asn Leu Thr Gly			
	420	425	430
Asp Val Leu Leu Ser Ser Gly Thr Val Ala Tyr Leu Gly Ala Phe Thr			
	435	440	445
Val Asp Tyr Arg Val Gln Cys Gln Asn Gln Trp Leu Ala Glu Cys Lys			
	450	455	460
Asp Lys Val Ile Pro Gly Phe Ser Asp Phe Ser Leu Ser His Thr Leu			
465	470	475	480
Gly Asp Pro Ile Lys Ile Arg Ala Trp Gln Ile Ala Gly Leu Pro Val			
	485	490	495
Asp Ser Phe Ser Ile Asp Asn Gly Ile Ile Val Ser Asn Ser Arg Arg			
	500	505	510
Trp Ala Leu Met Ile Asp Pro His Gly Gln Ala Asn Lys Trp Ile Lys			
	515	520	525
Asn Met Glu Lys Ala Asn Lys Leu Ala Val Ile Lys Phe Ser Asp Ser			

530	535	540	
Asn Tyr Met Arg Met Leu Glu Asn Ala Leu Gln Leu Gly Thr Pro Val			
545	550	555	560
Leu Ile Glu Asn Ile Gly Glu Glu Leu Asp Ala Ser Ile Glu Pro Ile			
565	570	575	
Leu Leu Lys Ala Thr Phe Lys Gln Gln Gly Val Glu Tyr Met Arg Leu			
580	585	590	
Gly Glu Asn Ile Ile Glu Tyr Ser Arg Asp Phe Lys Leu Tyr Ile Thr			
595	600	605	
Thr Arg Leu Arg Asn Pro His Tyr Leu Pro Glu Val Ala Val Lys Val			
610	615	620	
Cys Leu Leu Asn Phe Met Ile Thr Pro Leu Gly Leu Gln Asp Gln Leu			
625	630	635	640
Leu Gly Ile Val Ala Ala Lys Glu Lys Pro Glu Leu Glu Glu Lys Lys			
645	650	655	
Asn Gln Leu Ile Val Glu Ser Ala Lys Asn Lys Lys His Leu Lys Glu			
660	665	670	
Ile Glu Asp Lys Ile Leu Glu Val Leu Ser Met Ser Lys Gly Asn Ile			
675	680	685	
Leu Glu Asp Glu Thr Ala Ile Lys Val Leu Ser Ser Ser Lys Val Leu			
690	695	700	
Ser Glu Glu Ile Ser Glu Lys Gln Lys Val Ala Ser Met Thr Glu Thr			
705	710	715	720
Gln Ile Asp Glu Thr Arg Met Gly Tyr Lys Pro Val Ala Val His Ser			
725	730	735	
Ala Thr Ile Phe Phe Cys Ile Ser Asp Leu Ala Asn Ile Glu Pro Met			
740	745	750	
Tyr Gln Tyr Ser Leu Thr Trp Phe Ile Asn Leu Tyr Met His Ser Leu			
755	760	765	
Thr His Ser Thr Lys Ser Glu Glu Leu Asn Leu Arg Ile Lys Tyr Ile			
770	775	780	
Ile Asp His Phe Thr Leu Ser Ile Tyr Asn Asn Val Cys Arg Ser Leu			
785	790	795	800
Phe Glu Lys Asp Lys Leu Leu Phe Ser Leu Leu Leu Thr Ile Gly Ile			
805	810	815	
Met Lys Gln Lys Lys Glu Ile Thr Glu Glu Val Trp Tyr Phe Leu Leu			

820	825	830
Thr Gly Gly Ile Ala Leu Asp Asn Pro Tyr Pro Asn Pro Ala Pro Gln		
835	840	845
Trp Leu Ser Glu Lys Ala Trp Ala Glu Ile Val Arg Ala Ser Ala Leu		
850	855	860
Pro Lys Leu His Gly Leu Met Glu His Leu Glu Gln Asn Leu Gly Glu		
865	870	875
Trp Lys Leu Ile Tyr Asp Ser Ala Trp Pro His Glu Glu Gln Leu Pro		
885	890	895
Gly Ser Trp Lys Phe Ser Gln Gly Leu Glu Lys Met Val Ile Leu Arg		
900	905	910
Cys Leu Arg Pro Asp Lys Met Val Pro Ala Val Arg Glu Phe Ile Ala		
915	920	925
Glu His Met Gly Lys Leu Tyr Ile Glu Ala Pro Thr Phe Asp Leu Gln		
930	935	940
Gly Ser Tyr Asn Asp Ser Ser Cys Cys Ala Pro Leu Ile Phe Val Leu		
945	950	955
Ser Pro Ser Ala Asp Pro Met Ala Gly Leu Leu Lys Phe Ala Asp Asp		
965	970	975
Leu Gly Met Gly Gly Thr Arg Thr Gln Thr Ile Phe Leu Gly Gln Gly		
980	985	990
Gln Gly Pro Ile Ala Ala Lys Met Ile Asn Asn Ala Ile Lys Asp Gly		
995	1000	1005
Thr Trp Val Val Leu Gln Asn Cys His Leu Ala Ala Ser Trp Met Pro		
1010	1015	1020
Thr Leu Glu Lys Ile Cys Glu Glu Val Ile Val Pro Glu Ser Thr Asn		
1025	1030	1035
Ala Arg Phe Arg Leu Trp Leu Thr Ser Tyr Pro Ser Glu Lys Phe Pro		
1045	1050	1055
Val Ser Ile Leu Gln Asn Gly Ile Lys Met Thr Asn Glu Pro Pro Lys		
1060	1065	1070
Gly Leu Arg Ala Asn Leu Leu Arg Ser Tyr Leu Asn Asp Pro Ile Ser		
1075	1080	1085
Asp Pro Val Phe Phe Gln Ser Cys Ala Lys Ala Val Met Trp Gln Lys		
1090	1095	1100
Met Leu Phe Gly Leu Cys Phe Phe His Ala Val Val Gln Glu Arg Arg		

1105	1110	1115	1120
Asn Phe Gly Pro Leu Gly Trp Asn Ile Pro Tyr Glu Phe Asn Glu Ser			
1125	1130	1135	
Asp Leu Arg Thr Ser Met Trp Gln Ile Gln Met Phe Leu Asn Asp Tyr			
1140	1145	1150	
Lys Glu Val Pro Phe Asp Ala Leu Thr Tyr Leu Thr Gly Glu Cys Asn			
1155	1160	1165	
Tyr Gly Gly Arg Val Thr Asp Asp Lys Asp Arg Arg Leu Leu Leu Ser			
1170	1175	1180	
Leu Leu Ser Met Phe Tyr Cys Lys Glu Ile Glu Glu Asp Tyr Tyr Ser			
1185	1190	1195	1200
Leu Ala Pro Gly Asp Thr Tyr Tyr Ile Pro Pro His Gly Ser Tyr Gln			
1205	1210	1215	
Ser Tyr Ile Asp Tyr Leu Arg Asn Leu Pro Ile Thr Ala His Pro Glu			
1220	1225	1230	
Val Phe Gly Leu His Glu Asn Ala Asp Ile Thr Lys Asp Asn Gln Glu			
1235	1240	1245	
Thr Asn Gln Leu Phe Glu Gly Val Leu Leu Thr Leu Pro Arg Gln Ser			
1250	1255	1260	
Gly Gly Ser Gly Lys Ser Pro Gln Glu Val Val Glu Glu Leu Ala Gln			
1265	1270	1275	1280
Asp Ile Leu Ser Lys Leu Pro Arg Asp Phe Asp Leu Glu Glu Val Met			
1285	1290	1295	
Lys Leu Tyr Pro Val Val Tyr Glu Glu Ser Met Asn Thr Val Leu Arg			
1300	1305	1310	
Gln Glu Leu Ile Arg Phe Asn Arg Leu Thr Lys Val Val Arg Arg Ser			
1315	1320	1325	
Leu Ile Asn Leu Gly Arg Ala Ile Lys Gly Gln Val Leu Met Ser Ser			
1330	1335	1340	
Glu Leu Glu Glu Val Phe Asn Ser Met Leu Val Gly Lys Val Pro Ala			
1345	1350	1355	1360
Met Trp Ala Ala Lys Ser Tyr Pro Ser Leu Lys Pro Leu Gly Gly Tyr			
1365	1370	1375	
Val Ala Asp Leu Leu Ala Arg Leu Thr Phe Phe Gln Glu Trp Ile Asp			
1380	1385	1390	
Lys Gly Pro Pro Val Val Phe Trp Ile Ser Gly Phe Tyr Phe Thr Gln			

1395	1400	1405
Ser Phe Leu Thr Gly Val	Ser Gln Asn Tyr Ala Arg Lys Tyr Thr Ile	
1410	1415	1420
Pro Ile Asp His Ile Gly Phe Glu Phe Glu Val Thr Pro Gln Glu Thr		
1425	1430	1435
Val Met Glu Asn Asn Pro Glu Asp Gly Ala Tyr Ile Lys Gly Leu Phe		1440
	1445	1450
Leu Glu Gly Ala Arg Trp Asp Arg Lys Thr Met Gln Ile Gly Glu Ser		1455
1460	1465	1470
Leu Pro Lys Ile Leu Tyr Asp Pro Leu Pro Ile Ile Trp Leu Lys Pro		
1475	1480	1485
Gly Glu Ser Ala Met Phe Leu His Gln Asp Ile Tyr Val Cys Pro Val		
1490	1495	1500
Tyr Lys Thr Ser Ala Arg Arg Gly Thr Leu Ser Thr Thr Gly His Ser		
1505	1510	1515
Thr Asn Tyr Val Leu Ser Ile Glu Leu Pro Thr Asp Met Pro Gln Lys		1520
	1525	1530
His Trp Ile Asn Arg Gly Val Ala Ser Leu Cys Gln Leu Asp Asn		1535
1540	1545	1550

<210> 3836

<211> 416

<212> PRT

<213> Homo sapiens

<400> 3836

Met Gln Gly Ala Pro Arg Ala Arg Phe Gly Ser Arg Thr Pro Pro Ala
1 5 10 15
Ala Ala Ala Ser Ser Ser Ser Pro Ser Cys Thr Pro Ala Thr Ser Gln
20 25 30
Gly His Leu Arg Thr Pro Ala Gln Pro Pro Pro Ala Ser Pro Ala Ala
35 40 45
Ser Ser Ser Ser Ser Phe Ala Ala Val Val Arg Tyr Gly Pro Gly Ala
50 55 60
Ala Ala Ala Ala Gly Thr Gly Gly Thr Gly Ser Asp Ser Ala Ser Leu

65	70	75	80
Glu Leu Ser Ala Glu Ser Arg Met Ile Leu Asp Ala Phe Ala Gln Gln			
	85	90	95
Cys Ser Arg Val Leu Ser Leu Leu Asn Cys Gly Gly Lys Leu Leu Asp			
	100	105	110
Ser Asn His Ser Gln Ser Met Ile Ser Cys Val Lys Gln Glu Gly Ser			
	115	120	125
Ser Tyr Asn Glu Arg Gln Glu His Cys His Ile Gly Lys Gly Val His			
	130	135	140
Ser Gln Thr Ser Asp Asn Val Asp Ile Glu Met Gln Tyr Met Gln Arg			
145	150	155	160
Lys Gln Gln Thr Ser Ala Phe Leu Arg Val Phe Thr Asp Ser Leu Gln			
	165	170	175
Asn Tyr Leu Leu Ser Gly Ser Phe Pro Thr Pro Asn Pro Ser Ser Ala			
	180	185	190
Ser Glu Tyr Gly His Leu Ala Asp Val Asp Pro Leu Ser Thr Ser Pro			
	195	200	205
Val His Thr Leu Gly Gly Trp Thr Ser Pro Ala Thr Ser Glu Ser His			
	210	215	220
Gly His Pro Ser Ser Ser Thr Leu Pro Glu Glu Glu Glu Glu Asp			
225	230	235	240
Glu Glu Gly Tyr Cys Pro Arg Cys Gln Glu Leu Glu Gln Glu Val Ile			
	245	250	255
Ser Leu Gln Gln Glu Asn Glu Glu Leu Arg Arg Lys Leu Glu Ser Ile			
	260	265	270
Pro Val Pro Cys Gln Thr Val Leu Asp Tyr Leu Lys Met Val Leu Gln			
	275	280	285
His His Asn Gln Leu Leu Ile Pro Gln Pro Ala Asp Gln Pro Thr Glu			
	290	295	300
Gly Ser Lys Gln Leu Leu Asn Asn Tyr Pro Val Tyr Ile Thr Ser Lys			
305	310	315	320
Gln Trp Asp Glu Ala Val Asn Ser Ser Lys Lys Asp Gly Arg Arg Leu			
	325	330	335
Leu Arg Tyr Leu Ile Arg Phe Val Phe Thr Thr Asp Glu Leu Lys Tyr			
	340	345	350

<213> Homo sapiens

Met	Arg	Asn	Gln	Ala	Val	Asn	Val	Ala	Cys	Arg	Phe	His	Val	Asp	Val
1				5					10					15	
Ser	Phe	Gln	Ile	Ser	Gly	Phe	Asn	Ile	Cys	Asp	Ala	Leu	Gly	Thr	Cys
			20					25					30		
Gly	Ser	Ser	Pro	Leu	Ser	Phe	Val	Ser	His	Cys	Pro	Thr	Gly	Cys	Gln
			35				40					45			
Arg	Gly	Cys	Ala	Met	Ser	Tyr	Ser	Gln	Gln	Thr	Trp	Met	Arg	Val	Ser
	50					55					60				
Arg	Thr	Pro	Asn	Ser	Pro	Ser	Ile	Trp	Cys	Cys	Gln	Cys	Cys	Leu	Gly
65				70					75					80	
Arg	Leu	Met	Gly	Ser	Pro	Ser	Cys	His	Pro	Pro	Val	Gly	Pro	Thr	Met
			85					90						95	
Gly	Pro	Arg	Gly	Ser	Gly	Arg	Ala	Pro	Phe	Thr	Ile	Met	His	Asp	Phe
			100				105					110			
Val	Cys	Cys	Leu	Leu	Ser	Pro	Gln	Asp	Pro	Pro	Gly	Phe	Trp	Pro	His
	115					120					125				
Met	Phe	Gln	Pro	Gly	Pro	Gly	Leu	Gly	Thr	Arg	Glu	Val	Leu	Gly	Ser
	130					135				140					
Trp	Cys	Arg	Leu	Leu	Pro	Gly	Leu	Gly	Glu	Leu	Leu	Ala	Ala	Leu	Ser
145				150					155					160	

Ser Leu Leu Gly Asp Pro Gly Phe Cys Ser Gly Lys Val Pro Ile Pro

165 170 175

Leu Ile His Pro Ile Ser Ser Gly Thr Leu Trp Leu Ser

180 185

<210> 3838

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3838

Met Ala Leu Lys Phe Gln Gly Lys Tyr Asp Gln Ala Val His Gln Glu

1 5 10 15

Ala Gln Met Pro His Gly Gln Gly Asn Ser Phe Ser Arg Arg Pro Thr

20 25 30

Asp Phe Ser Cys Leu Gly Ser Glu Glu Ala Thr Lys Ile Cys Pro Ser

35 40 45

Thr Arg Leu Ser Gly Glu Met Ser Arg Leu His Phe His Gln Ser Leu

50 55 60

Ser Ser Ser Pro Thr Pro Gln Thr Thr Gly Arg Leu Gly Gly Ser Ser

65 70 75 80

Lys Phe Leu Val Ala Asp Ser Leu Val Val Ile Met Phe Gln Lys Leu

85 90 95

Lys Trp Glu Trp Lys Leu Ser Ser Phe Leu Tyr Ser Lys Asn Cys Leu

100 105 110

Gln His Ile Pro

115

<210> 3839

<211> 1264

<212> PRT

<213> Homo sapiens

<400> 3839

Met	Ser	Leu	Gln	Arg	Glu	Pro	Pro	Arg	Pro	Glu	Pro	Pro	Pro	Pro	Phe
1				5					10					15	
Pro	Pro	Leu	Pro	Leu	Gln	Pro	Pro	Pro	Pro	Arg	Glu	Ser	Ala	Ser	Arg
			20					25					30		
Ala	Glu	Gln	Pro	Pro	Arg	Pro	Pro	Arg	Glu	Thr	Val	Arg	Leu	Glu	Leu
		35					40					45			
Val	Leu	Lys	Asp	Pro	Thr	Asp	Glu	Ser	Cys	Val	Glu	Phe	Ser	Tyr	Pro
	50					55					60				
Glu	Leu	Leu	Leu	Cys	Gly	Glu	Gln	Arg	Lys	Lys	Leu	Ile	His	Thr	Glu
65					70					75					80
Asp	Pro	Phe	Asn	Asp	Glu	His	Gln	Glu	Arg	Gln	Glu	Val	Glu	Met	Leu
			85						90					95	
Ala	Lys	Lys	Phe	Glu	Met	Lys	Tyr	Gly	Gly	Lys	Pro	Arg	Lys	His	Arg
		100						105					110		
Lys	Asp	Arg	Leu	Gln	Asp	Leu	Ile	Asp	Ile	Gly	Phe	Gly	Tyr	Asp	Glu
	115					120						125			
Thr	Asp	Pro	Phe	Ile	Asp	Asn	Ser	Glu	Ala	Tyr	Asp	Glu	Leu	Val	Pro
	130					135					140				
Ala	Ser	Leu	Thr	Thr	Lys	Tyr	Gly	Gly	Phe	Tyr	Ile	Asn	Thr	Gly	Thr
145					150					155					160
Leu	Gln	Phe	Arg	Gln	Ala	Ser	Asp	Thr	Glu	Glu	Asp	Asp	Ile	Thr	Asp
			165						170				175		
Asn	Gln	Lys	His	Lys	Pro	Pro	Lys	Val	Pro	Lys	Ile	Lys	Glu	Asp	Asp
		180						185					190		
Ile	Glu	Met	Lys	Lys	Arg	Lys	Arg	Lys	Glu	Glu	Gly	Glu	Lys	Glu	Lys
	195					200						205			
Lys	Pro	Arg	Lys	Lys	Val	Pro	Lys	Gln	Leu	Gly	Val	Val	Ala	Leu	Asn
	210					215					220				
Ser	His	Lys	Ser	Glu	Lys	Lys	Lys	Lys	Arg	Tyr	Lys	Asp	Ser	Leu	Ser
225					230					235				240	
Leu	Ala	Ala	Met	Ile	Arg	Lys	Phe	Gln	Lys	Glu	Lys	Asp	Ala	Leu	Lys
			245					250					255		
Lys	Glu	Ser	Asn	Pro	Lys	Val	Pro	Val	Thr	Leu	Ser	Thr	Pro	Ser	Leu
	260							265					270		
Asn	Lys	Pro	Pro	Cys	Ala	Ala	Ala	Ala	Leu	Gly	Asn	Asp	Val	Pro	Asp
	275						280						285		

Leu Asn Leu Ser Ser Gly Asp Pro Asp Leu Pro Ile Phe Val Ser Thr
 290 295 300
 Asn Glu His Glu Leu Phe Gln Glu Ala Glu Asn Ala Leu Glu Met Leu
 305 310 315 320
 Asp Asp Phe Asp Phe Asp Arg Leu Leu Asp Ala Ala Ser Asp Gly Ser
 325 330 335
 Pro Leu Ser Glu Ser Gly Gly Glu Asn Gly Thr Thr Thr Gln Pro Thr
 340 345 350
 Tyr Thr Ser Gln Val Met Pro Lys Val Val Pro Thr Leu Pro Glu Gly
 355 360 365
 Leu Pro Val Leu Leu Glu Lys Arg Ile Glu Asp Leu Arg Val Ala Ala
 370 375 380
 Lys Leu Phe Asp Glu Glu Gly Arg Lys Lys Phe Phe Thr Gln Asp Met
 385 390 395 400
 Asn Asn Ile Leu Leu Asp Ile Glu Leu Gln Leu Gln Glu Leu Gly Pro
 405 410 415
 Val Ile Arg Ser Gly Val Tyr Ser His Leu Glu Ala Phe Val Pro Cys
 420 425 430
 Asn Lys Glu Thr Leu Val Lys Arg Leu Lys Lys Leu His Leu Asn Val
 435 440 445
 Gln Asp Asp Arg Leu Arg Glu Pro Leu Gln Lys Leu Lys Leu Ala Val
 450 455 460
 Ser Asn Val Met Pro Glu Gln Leu Phe Lys Tyr Gln Glu Asp Cys Gln
 465 470 475 480
 Ala Arg Ser Gln Ala Lys Cys Ala Lys Leu Gln Thr Asp Glu Glu Arg
 485 490 495
 Glu Lys Asn Gly Ser Glu Glu Asp Asp Asp Glu Lys Pro Gly Lys Arg
 500 505 510
 Val Ile Gly Pro Arg Lys Lys Phe His Trp Asp Asp Thr Ile Arg Thr
 515 520 525
 Leu Leu Cys Asn Leu Val Glu Ile Lys Leu Gly Cys Tyr Glu Leu Glu
 530 535 540
 Pro Asn Lys Ser Gln Ser Ala Glu Asp Tyr Leu Lys Ser Phe Met Glu
 545 550 555 560
 Thr Glu Val Lys Pro Leu Trp Pro Lys Gly Trp Met Gln Ala Arg Met
 565 570 575

Leu Phe Lys Glu Ser Arg Ser Val His Asn His Leu Thr Ser Ala Pro
 580 585 590
 Ala Lys Lys Lys Val Ile Pro Ala Pro Lys Pro Lys Val Lys Glu Val
 595 600 605
 Met Val Lys Thr Leu Pro Leu His Ser Phe Pro Thr Met Leu Lys Glu
 610 615 620
 Cys Ser Pro Lys Lys Asp Gln Lys Thr Pro Thr Ser Leu Val Ala Ser
 625 630 635 640
 Val Ser Gly Pro Pro Thr Ser Ser Ser Thr Ala Ala Ile Ala Ala Ala
 645 650 655
 Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp Ser
 660 665 670
 Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val Ser
 675 680 685
 Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val Gly
 690 695 700
 Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg Glu
 705 710 715 720
 Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro Lys
 725 730 735
 Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala Gly
 740 745 750
 His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr Gly
 755 760 765
 Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys Val
 770 775 780
 Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln Arg
 785 790 795 800
 Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser Ser
 805 810 815
 Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr Ser
 820 825 830
 Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His Gln
 835 840 845
 His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr Ile
 850 855 860

Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro Gln
 865 870 875 880
 Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu Met
 885 890 895
 Tyr Arg Leu Pro Leu Ser Thr Pro Ser Pro Gly Asn Gly Ser Gln Gly
 900 905 910
 Ser His Pro Leu Val Ser Arg Thr Val Pro Ser Thr Thr Thr Ser Ser
 915 920 925
 Asn Tyr Leu Ala Lys Ala Met Val Ser Gln Ile Ser Thr Gln Gly Phe
 930 935 940
 Lys Ser Pro Phe Ser Met Ala Ala Ser Pro Lys Leu Ala Ala Ser Pro
 945 950 955 960
 Lys Pro Ala Thr Ser Pro Lys Pro Leu Pro Ser Pro Lys Pro Ser Ala
 965 970 975
 Ser Pro Lys Pro Ser Leu Ser Ala Lys Pro Ser Val Ser Thr Lys Leu
 980 985 990
 Ile Ser Lys Ser Asn Pro Thr Pro Lys Pro Thr Val Ser Pro Ser Ser
 995 1000 1005
 Ser Ser Pro Asn Ala Leu Val Ala Gln Gly Ser His Ser Ser Thr Asn
 1010 1015 1020
 Ser Pro Val His Lys Gln Pro Ser Gly Met Asn Ile Ser Arg Gln Ser
 1025 1030 1035 1040
 Pro Thr Leu Asn Leu Leu Pro Ser Ser Arg Thr Ser Gly Leu Pro Pro
 1045 1050 1055
 Thr Lys Asn Leu Gln Ala Pro Ser Lys Leu Thr Asn Ser Ser Ser Thr
 1060 1065 1070
 Gly Thr Val Gly Lys Asn Ser Leu Ser Gly Ile Ala Met Asn Val Pro
 1075 1080 1085
 Ala Ser Arg Gly Ser Asn Leu Asn Ser Ser Gly Ala Asn Arg Thr Ser
 1090 1095 1100
 Leu Ser Gly Gly Thr Gly Ser Gly Thr Gln Gly Ala Thr Lys Pro Leu
 1105 1110 1115 1120
 Ser Thr Pro His Arg Pro Ser Thr Ala Ser Gly Ser Ser Val Val Thr
 1125 1130 1135
 Ala Ser Val Gln Ser Thr Ala Gly Ala Ser Leu Leu Ala Asn Ala Ser
 1140 1145 1150

Pro Leu Thr Leu Met Thr Ser Pro Leu Ser Val Thr Asn Gln Asn Val
 1155 1160 1165
 Thr Pro Phe Gly Met Leu Gly Gly Leu Val Pro Val Thr Met Pro Phe
 1170 1175 1180
 Gln Phe Pro Leu Glu Ile Phe Gly Phe Gly Thr Asp Thr Ala Gly Val
 1185 1190 1195 1200
 Thr Thr Thr Ser Gly Ser Thr Ser Ala Ala Phe His His Ser Leu Thr
 1205 1210 1215
 Gln Asn Leu Leu Lys Gly Leu Gln Pro Gly Gly Ala Gln His Ala Ala
 1220 1225 1230
 Thr Leu Ser His Ser Pro Leu Pro Ala His Leu Gln Gln Ala Phe His
 1235 1240 1245
 Asp Gly Gly Gln Ser Lys Gly Asp Thr Lys Leu Pro Arg Lys Ser Gln
 1250 1255 1260

<210> 3840

<211> 1215

<212> PRT

<213> Homo sapiens

<400> 3840

Met Ala Met Arg Leu His Phe Gln Pro Pro His Pro Asn Cys Leu Tyr
 1 5 10 15
 Thr Val Glu Leu Glu Ala Phe Ala Ile Tyr Lys Val Leu Gln Ser Tyr
 20 25 30
 Ser Asn Ile Glu Glu Asp Cys Thr Met Cys Pro Ser Trp Cys Leu Thr
 35 40 45
 Val Arg Ala Arg Gly His Ser Tyr Phe Ala Gly Phe Glu His His Ile
 50 55 60
 Pro Gln Tyr Ser Leu Asp Val Pro Lys Leu Phe Pro Ala Val Ser Ser
 65 70 75 80
 Gly Glu Pro Thr Tyr Arg Ser Leu Leu Leu Val Asn Lys Asp Cys Lys
 85 90 95
 Leu Leu Thr Phe Ser Leu Ala Pro Gln Arg Gly Ser Asp Val Ile Leu

100	105	110
Arg Pro Thr Ser Gly Leu Val	Ala Pro Gly Ala His Gln Ile Ile Leu	
115	120	125
Ile Cys Thr Tyr Pro Glu Gly Ser Ser Trp Lys Gln His Thr Phe Tyr		
130	135	140
Leu Gln Cys Asn Ala Ser Pro Gln Tyr Leu Lys Glu Val Ser Met Tyr		
145	150	155
Ser Arg Glu Glu Pro Leu Gln Leu Lys Leu Asp Thr His Lys Ser Leu		
165	170	175
Tyr Phe Lys Pro Thr Trp Val Gly Cys Ser Ser Thr Ser Pro Phe Thr		
180	185	190
Phe Arg Asn Pro Ser Arg Leu Pro Leu Gln Phe Glu Trp Arg Val Ser		
195	200	205
Glu Gln His Arg Lys Leu Leu Ala Val Gln Pro Ser Arg Gly Leu Ile		
210	215	220
Gln Pro Asn Glu Arg Leu Thr Leu Thr Trp Thr Phe Ser Pro Leu Glu		
225	230	235
Glu Thr Lys Tyr Leu Phe Gln Val Gly Met Trp Val Trp Glu Ala Gly		
245	250	255
Leu Ser Pro Asn Ala Asn Pro Ala Ala Thr Thr His Tyr Met Leu Arg		
260	265	270
Leu Val Gly Val Gly Leu Thr Ser Ser Leu Ser Ala Lys Glu Lys Glu		
275	280	285
Leu Ala Phe Gly Asn Val Leu Val Asn Ser Lys Gln Ser Arg Phe Leu		
290	295	300
Val Leu Leu Asn Asp Gly Asn Cys Thr Leu Tyr Tyr Arg Leu Tyr Leu		
305	310	315
Glu Gln Gly Ser Pro Glu Ala Val Asp Asn His Pro Leu Ala Leu Gln		
325	330	335
Leu Asp Arg Thr Glu Gly Ser Met Pro Pro Arg Ser Gln Asp Thr Ile		
340	345	350
Cys Leu Thr Ala Cys Pro Lys Gln Arg Ser Gln Tyr Ser Trp Thr Ile		
355	360	365
Thr Tyr Ser Leu Leu Ser His Arg Asp Asn Lys Ala Gly Gly Lys Gln		
370	375	380
Glu Leu Cys Cys Val Ser Leu Val Ala Val Tyr Pro Leu Leu Ser Ile		

385	390	395	400
Leu Asp Val Ser Ser Met Gly Ser Ala Glu Gly Ile Thr Arg Lys His			
405	410	415	
Leu Trp Arg Leu Phe Ser Leu Asp Leu Leu Asn Ser Tyr Leu Glu Arg			
420	425	430	
Asp Pro Thr Pro Cys Glu Leu Thr Tyr Lys Val Pro Thr Arg His Ser			
435	440	445	
Met Ser Gln Ile Pro Pro Val Leu Thr Pro Leu Arg Leu Asp Phe Asn			
450	455	460	
Phe Gly Ala Ala Pro Phe Lys Ala Pro Pro Ser Val Val Phe Leu Ala			
465	470	475	480
Leu Lys Asn Ser Gly Val Val Ser Leu Asp Trp Ala Phe Leu Leu Pro			
485	490	495	
Ser Asp Gln Arg Ile Asp Val Glu Leu Trp Ala Glu Gln Ala Glu Leu			
500	505	510	
Asn Ser Thr Glu Leu His Gln Met Arg Val Gln Asp Asn Cys Leu Phe			
515	520	525	
Ser Ile Ser Pro Lys Ala Gly Ser Leu Ser Pro Gly Gln Glu Gln Met			
530	535	540	
Val Glu Leu Lys Tyr Ser His Leu Phe Ile Gly Thr Asp His Leu Pro			
545	550	555	560
Val Leu Phe Lys Val Ser His Gly Arg Glu Ile Leu Leu Asn Phe Ile			
565	570	575	
Gly Val Thr Val Lys Pro Glu Gln Lys Tyr Val His Phe Thr Ser Thr			
580	585	590	
Thr His Gln Phe Ile Pro Ile Pro Ile Gly Asp Thr Leu Pro Pro Arg			
595	600	605	
Gln Ile Tyr Glu Leu Tyr Asn Gly Gly Ser Val Pro Val Thr Tyr Glu			
610	615	620	
Val Gln Thr Asp Val Leu Ser Gln Val Gln Glu Lys Asn Phe Asp His			
625	630	635	640
Pro Ile Phe Cys Cys Leu Asn Pro Lys Gly Glu Ile Gln Pro Gly Ser			
645	650	655	
Thr Ala Arg Val Leu Trp Ile Phe Ser Pro Ile Glu Ala Lys Thr Tyr			
660	665	670	
Thr Val Asp Val Pro Ile His Ile Leu Gly Trp Asn Ser Ala Leu Ile			

675	680	685	
His Phe Gln Gly Val Gly Tyr Asn Pro His Met Met Gly Asp Thr Ala			
690	695	700	
Pro Phe His Asn Ile Ser Ser Trp Asp Asn Ser Ser Ile His Ser Arg			
705	710	715	720
Leu Val Val Pro Gly Gln Asn Val Phe Leu Ser Gln Ser His Ile Ser			
725	730	735	
Leu Gly Asn Ile Pro Val Gln Ser Lys Cys Ser Arg Leu Leu Phe Leu			
740	745	750	
Asn Asn Ile Ser Lys Asn Glu Glu Ile Ala Phe Ser Trp Gln Pro Ser			
755	760	765	
Pro Leu Asp Phe Gly Glu Val Ser Val Ser Pro Met Ile Gly Val Val			
770	775	780	
Ala Pro Glu Glu Thr Val Pro Phe Val Val Thr Leu Arg Ala Ser Val			
785	790	795	800
His Ala Ser Phe Tyr Ser Ala Asp Leu Val Cys Lys Leu Tyr Ser Gln			
805	810	815	
Gln Leu Met Arg Gln Tyr His Lys Glu Leu Gln Glu Trp Lys Asp Glu			
820	825	830	
Lys Val Arg Gln Glu Val Glu Phe Thr Ile Thr Asp Met Lys Val Lys			
835	840	845	
Lys Arg Thr Cys Cys Thr Ala Cys Glu Pro Ala Arg Lys Tyr Lys Thr			
850	855	860	
Leu Pro Pro Ile Lys Asn Gln Gln Ser Val Ser Arg Pro Ala Ser Trp			
865	870	875	880
Lys Leu Gln Thr Pro Lys Glu Glu Val Ser Trp Pro Cys Pro Gln Pro			
885	890	895	
Pro Ser Pro Gly Ile Leu Cys Leu Gly Leu Thr Ala Arg Ala His Ala			
900	905	910	
Thr Asp Tyr Phe Leu Ala Asn Phe Phe Ser Gly Phe Pro Cys His Phe			
915	920	925	
Leu His Arg Glu Leu Pro Lys Arg Lys Ala Pro Arg Glu Glu Ser Glu			
930	935	940	
Thr Ser Glu Glu Lys Ser Pro Asn Lys Trp Gly Pro Val Ser Lys Gln			
945	950	955	960
Lys Lys Gln Leu Leu Val Asp Ile Leu Thr Thr Ile Ile Arg Gly Leu			

965	970	975
Leu Glu Asp Lys Asn Phe His Glu Ala Val Asp Gln Ser Leu Val Glu		
980	985	990
Gln Val Pro Tyr Phe Arg Gln Phe Trp Asn Glu Gln Ser Thr Lys Phe		
995	1000	1005
Met Asp Gln Lys Asn Ser Leu Tyr Leu Met Pro Ile Leu Pro Val Pro		
1010	1015	1020
Ser Ser Ser Trp Glu Asp Gly Lys Gly Lys Gln Pro Lys Glu Asp Arg		
1025	1030	1035
Pro Glu His Tyr Pro Gly Leu Gly Lys Lys Glu Glu Gly Glu Glu Glu		
1045	1050	1055
Lys Gly Glu Glu Glu Glu Glu Glu Leu Glu Glu Glu Glu Glu Glu Glu		
1060	1065	1070
Glu Glu Thr Glu Glu Glu Glu Leu Gly Lys Glu Glu Ile Glu Glu Lys		
1075	1080	1085
Glu Glu Glu Arg Asp Glu Lys Glu Glu Lys Val Ser Trp Ala Gly Ile		
1090	1095	1100
Gly Pro Thr Pro Gln Pro Glu Ser Gln Glu Ser Met Gln Trp Gln Trp		
1105	1110	1115
Gln Gln Gln Leu Asn Val Met Val Lys Glu Glu Gln Glu Gln Asp Glu		
1125	1130	1135
Lys Glu Ala Ile Arg Arg Leu Pro Ala Phe Ala Asn Leu Gln Glu Ala		
1140	1145	1150
Leu Leu Glu Asn Met Ile Gln Asn Ile Leu Val Glu Ala Ser Arg Gly		
1155	1160	1165
Glu Val Val Leu Thr Ser Arg Pro Arg Val Ile Ala Leu Pro Pro Phe		
1170	1175	1180
Cys Val Pro Arg Ser Leu Thr Pro Asp Thr Leu Leu Pro Thr Gln Gln		
1185	1190	1195
Ala Glu Val Leu His Pro Val Val Pro Leu Pro Thr Asp Leu Pro		
1205	1210	1215

<210> 3841

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3841

Met Gly Glu Asn Ala Val Ile Pro Phe Leu Ser Pro Gln Lys Gly His
 1 5 10 15
 Gly Cys Arg Glu Trp Trp Leu Met Pro Ile Ile Pro Ala Leu Trp Glu
 20 25 30
 Ala Glu Val Gly Arg Ser Pro Glu Val Arg Ser Leu Arg Pro Ala Trp
 35 40 45
 Leu Thr Trp Arg Asn Pro Phe Ser Thr Lys Asn Thr Lys Ile Ser Gln
 50 55 60
 Ser Trp Trp Arg Ala Pro Val Ile Pro Ala Thr Trp Glu Thr Glu Ala
 65 70 75 80
 Gly Glu Ser Leu Glu Pro Gly Arg Leu Glu Val Ala Val Ser Arg Asp
 85 90 95
 Trp Ala Thr Ala Leu Gln Pro Gly Gln Trp Ser Ile Ser Lys Lys Lys
 100 105 110
 Lys Glu Arg Lys Lys Lys Glu Gly Gly Cys His Gly
 115 120

<210> 3842

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3842

Met Arg Gly Leu Gln Trp Asn Gln Asp Pro Glu His Arg Arg Val Gly
 1 5 10 15
 Ser Pro Ala Cys Ser Ala Ser Ser Phe Leu Leu Leu Leu Leu Phe Glu
 20 25 30
 Thr Glu Ser Cys Ser Val Phe Arg Leu Glu Cys Ser Gly Arg Ile Leu
 35 40 45
 Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser
 50 55 60
 Ala Ser Arg Val Ala Gly Thr Thr Gly Met Cys His His Ala Leu Leu

65 70 75 80
 Ile Phe Val Phe Leu Val Glu Met Gly Phe His Tyr Val Gly Gln Val
 85 90 95
 Gly Leu Asp Leu Leu Thr Leu
 100

<210> 3843

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3843

Met Val Pro Met His Cys Phe Trp Val Ile Ile Arg Arg Arg Met Asn
 1 5 10 15
 Ser Gly His Trp Ala Thr Asp Gly Gln Leu Leu Ala Pro Gly Leu Gly
 20 25 30
 Leu Cys Val Gly Thr His Ala Ser Ala Leu Thr Cys Ser Cys Ser Ser
 35 40 45
 Met Val Pro Ser Leu Ile Cys Gly Val Gln Arg Arg Arg Met Ala Ala
 50 55 60
 Ser Leu Leu Tyr Pro Val Tyr Pro Ser Pro Cys Cys Trp His Leu Arg
 65 70 75 80
 Leu Ser Pro His Ala Leu Ile Ser Leu Cys Thr Thr Tyr Gln Glu Val
 85 90 95
 Leu Gln Trp Trp Leu Cys Leu Pro Ser Leu Arg Thr Leu Lys Thr Leu
 100 105 110
 Ala Leu Pro Arg Gln Gln Ala Leu Pro Thr Ser Ala Phe Pro Pro Asn
 115 120 125
 Asp Met Ala Met Phe Cys Phe Pro Arg Ser Ile Leu Ser His Ser Gln
 130 135 140
 Gln Gly Val Asp Ile Leu Val
 145 150

<210> 3844

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3844

Met Pro Thr Leu His Arg Glu Arg Gln Gly Leu Ser Pro Lys Glu Ala
 1 5 10 15
 Met Leu Cys Phe Ile Gln Glu Ala Cys Arg Leu Glu Asp Val Pro Val
 20 25 30
 His Phe Phe Arg Leu His Lys Asp Lys Lys Glu Gly Arg Pro Thr Val
 35 40 45
 Ile Leu Gly Leu Ala Leu Arg Gly Val His Ile Tyr Gln Glu Val Asp
 50 55 60
 Arg Ala Pro Gln Leu Leu Tyr Asp Leu Pro Trp Pro His Val Gly Lys
 65 70 75 80
 Leu Ala Phe Leu Gly Lys Lys Leu Glu Ile Gln Leu Asp Gly Leu Pro
 85 90 95
 Ala Ala Gln Lys Leu Val Tyr Tyr Thr Gly Cys Thr Trp Arg Ser Arg
 100 105 110
 His Leu Leu His Leu Leu Arg Ala Ser His Gln Leu His Leu Arg Val
 115 120 125
 Arg Pro Thr Leu Gln Gln Leu Arg Gln Arg Glu Glu Ala Glu Glu Lys
 130 135 140
 Gln His Tyr Arg Glu Ser Tyr Ile Ser Asp Glu Leu Glu Leu Asp Leu
 145 150 155 160
 Ala Ser Arg Ser Phe Pro Gly Ser Gly Val Ser Ser Gln His Cys Pro
 165 170 175
 His Cys Leu Ser Arg His Ser Ala Asp Ser His Gly Ser Ser Tyr Thr
 180 185 190
 Ser Gly Ile Lys Ala Asn Ser Trp Leu Arg Glu Ser Arg Glu Met Ser
 195 200 205
 Val Asp Val Pro Leu Glu Val His Gly Leu His Glu Lys Glu Pro Ser
 210 215 220
 Ser Ser Pro Arg Thr Ser Arg Ser His Pro Ser Thr Arg Gly Asp Ser
 225 230 235 240
 Gln Ala Thr Arg Gln Glu Pro Cys Thr Gln Val Arg Thr Arg Gly Gln

245 250 255
 Ser Ala Glu Ala Val His Gln Phe Pro Pro Val
 260 265

<210> 3845

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3845

Met Leu Glu Glu Pro Phe Ser Pro Pro Leu Arg Cys Gly Gly Pro Ser
 1 5 10 15
 Leu Gly Trp Pro Arg Pro Glu Pro Ala Pro Ser Ala Cys Arg Glu Val
 20 25 30
 Trp Arg Glu Arg Pro Gln Ala Gly Thr Gly Ala Ala Arg Ser Asp Gly
 35 40 45
 Arg Pro Ala Arg Val Pro Ser Gly Ser Gly Leu Ser Gly Ser Cys Gly
 50 55 60
 Gly Gly Ala Gly Tyr Pro Ser Thr Ala Gly Leu Pro Ala Pro Arg Ser
 65 70 75 80
 Asn Ser Arg Ser Ala Ser Ala Ala Ser Pro Pro Gly Arg Ala Arg Asp
 85 90 95
 Leu Gln Pro Ala Leu Pro Glu Ser Thr Arg Gly Gly Leu Pro Ala Ala
 100 105 110
 Lys Pro Pro
 115

<210> 3846

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3846

Met Ser Ala His Gln Gln Gly Glu Thr Ser Leu Pro Arg Ala Gln Gly

1	5	10	15
Gly Arg Ser Glu Leu Ala Asp Ser Ser Trp Lys Pro Val Arg Gly Ala			
20	25	30	
Val Pro Arg Gly Met Thr Leu Ala Pro Ala Gln Ile Leu Leu Cys			
35	40	45	
Gly Leu Pro Gly Leu Pro Ser Pro Pro Pro Gly Leu Leu Trp Thr Asp			
50	55	60	
Ile Ala Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro			
65	70	75	80
Pro Pro Pro Arg Phe Lys Leu Phe Ser Cys Leu Ser Leu Leu Ser Ser			
85	90	95	
Trp Asp Tyr Arg Ser Trp Trp Leu Trp Leu Val Ile Pro Ala Ser Cys			
100	105	110	
Trp Leu Gln Val Asp Asp Ala His Leu Ala Ala Asp Asp Leu Cys Thr			
115	120	125	
Lys			

<210> 3847

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3847

Met Trp Val Thr Lys Phe Lys Gly Arg Glu Lys Lys Leu Met Lys Ile			
1	5	10	15
Glu Ala His Leu Gly Leu Pro Ser Phe Ser Gly Ser Thr Leu Asp Phe			
20	25	30	
Phe Arg Ala Trp Ala Leu Ser Arg Glu Leu His Leu Ile Pro Trp Ala			
35	40	45	
Ala Arg Ser Ser Leu Gly Pro Arg Leu Trp Arg Leu Leu Gly Gly Pro			
50	55	60	
Phe Leu Cys Leu His Ser Arg Arg Leu Ala Gly Glu Thr Gln Asp Leu			
65	70	75	80
Arg Leu Pro Gly His Leu His Cys Cys Pro Leu Gly Phe Cys Leu Arg			

	85	90	95
Leu Cys Leu Gly Leu Cys Leu Ser Leu Arg Leu Gln Leu Gly Gly Arg			
100	105	110	
Leu Leu Val Arg Ala Arg Phe Gly Gly Pro Gln Gly Phe Ser Ser Pro			
115	120	125	
Gly Thr Leu Pro Leu Leu Val Asp Gly His Arg Gly Arg Ser Pro Cys			
130	135	140	
Leu Gly Leu His Pro Ala Val Ala Glu Asp Leu Val Asp Val Glu Pro			
145	150	155	160
Pro Val Asp Val Gly Leu Gln His Val Val Asp Glu Val Leu Ala Leu			
165	170	175	
Ala Cys Gln Val Leu Gly Ala Trp Glu Val Asp Ala Val Leu Leu Leu			
180	185	190	
Asp Thr Gln His Leu Leu Asp Val Gly Val Val Val Gly His Gly Ala			
195	200	205	
Ala Asp His Asp Val Glu Asp His Ala			
210	215		

<210> 3848

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3848

Met Lys Ser Gln Met Glu Leu Arg Ile Lys Asp Leu Glu Phe Lys Leu			
1	5	10	15
Tyr Lys Ala Arg Thr Ser Gln Ala Asp Cys Asn Thr Thr Glu Leu Glu			
20	25	30	
Lys Tyr Lys Glu Leu Tyr Leu Glu Glu Leu Lys Leu Arg Glu Ser Leu			
35	40	45	
Ser Asp Glu Leu Asn Lys Arg Lys Glu Ile Leu Ala Asp Val Ser Thr			
50	55	60	
Lys Leu Leu Gln Glu Lys Glu Trp Ser Arg Ser Leu Phe Thr Ser His			
65	70	75	80
Thr Thr Arg Pro Val Leu Glu Ser Ala Cys Asn Gly Asn Leu Asn Glu			

	85	90	95
Asn Leu Gly Leu Ser Arg Ile His Ile Pro Arg Glu Ala Leu Arg Ile			
100	105	110	
Pro Thr Leu Asn Ser Leu Ser Ser Asn Ile Arg Met Glu Ser Asp Leu			
115	120	125	
Ser Lys Glu Asp Lys Asn Gly Gly His Phe Leu Glu Leu Gln Ala			
130	135	140	

<210> 3849

<211> 609

<212> PRT

<213> Homo sapiens

<400> 3849

Met Leu Leu Leu Ala Ser Thr Glu Pro Ser Ser Leu Cys Tyr Val Glu			
1	5	10	15
Thr Val Asp Ile Asp Gly Glu Thr Asn Leu Lys Phe Arg Gln Ala Leu			
20	25	30	
Met Val Thr His Lys Glu Leu Ala Thr Ile Lys Lys Met Ala Ser Phe			
35	40	45	
Gln Gly Thr Val Thr Cys Glu Ala Pro Asn Ser Arg Met His His Phe			
50	55	60	
Val Gly Cys Leu Glu Trp Asn Asp Lys Lys Tyr Ser Leu Asp Ile Gly			
65	70	75	80
Asn Leu Leu Leu Arg Gly Cys Arg Ile Arg Asn Thr Asp Thr Cys Tyr			
85	90	95	
Gly Leu Val Ile Tyr Ala Gly Phe Asp Thr Lys Ile Met Lys Asn Cys			
100	105	110	
Gly Lys Ile His Leu Lys Arg Thr Lys Leu Asp Leu Leu Val Asn Lys			
115	120	125	
Leu Val Val Val Ile Phe Ile Ser Val Val Leu Val Cys Leu Val Leu			
130	135	140	
Ala Phe Gly Phe Gly Phe Ser Val Lys Glu Phe Lys Asp His His Tyr			
145	150	155	160
Tyr Leu Ser Gly Val His Gly Ser Ser Val Ala Ala Glu Ser Phe Phe			

	165	170	175
Val Phe Trp Ser Phe Leu Ile Leu Leu Ser Val Thr Ile Pro Met Ser			
	180	185	190
Met Phe Ile Leu Ser Glu Phe Ile Tyr Leu Gly Asn Ser Val Phe Ile			
	195	200	205
Asp Trp Asp Val Gln Met Tyr Tyr Lys Pro Gln Asp Val Pro Ala Lys			
	210	215	220
Ala Arg Ser Thr Ser Leu Asn Asp His Leu Gly Gln Val Glu Tyr Ile			
225	230	235	240
Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln Asn Ile Leu Thr Phe Asn			
	245	250	255
Lys Cys Cys Ile Ser Gly Arg Val Tyr Gly Pro Asp Ser Glu Ala Thr			
	260	265	270
Thr Arg Pro Lys Glu Asn Pro Tyr Leu Trp Asn Lys Phe Ala Asp Gly			
	275	280	285
Lys Leu Leu Phe His Asn Ala Ala Leu Leu His Leu Val Arg Thr Asn			
	290	295	300
Gly Asp Glu Ala Val Arg Glu Phe Trp Arg Leu Leu Ala Ile Cys His			
305	310	315	320
Thr Val Met Val Arg Glu Ser Pro Arg Glu Arg Pro Asp Gln Leu Leu			
	325	330	335
Tyr Gln Ala Ala Ser Pro Asp Glu Gly Ala Leu Val Thr Ala Ala Arg			
	340	345	350
Asn Phe Gly Tyr Val Phe Leu Ser Arg Thr Gln Asp Thr Val Thr Ile			
	355	360	365
Met Glu Leu Gly Glu Glu Arg Val Tyr Gln Val Leu Ala Ile Met Asp			
	370	375	380
Phe Asn Ser Thr Arg Lys Arg Met Ser Val Leu Val Arg Lys Pro Glu			
385	390	395	400
Gly Ala Ile Cys Leu Tyr Thr Lys Gly Ala Asp Thr Val Ile Phe Glu			
	405	410	415
Arg Leu His Arg Arg Gly Ala Met Glu Phe Ala Thr Glu Glu Ala Leu			
	420	425	430
Ala Ala Phe Ala Gln Glu Thr Leu Arg Thr Leu Cys Leu Ala Tyr Arg			
	435	440	445

Glu Val Ala Glu Asp Ile Tyr Glu Asp Trp Gln Gln Arg His Gln Glu
 450 455 460
 Ala Ser Leu Leu Leu Gln Asn Arg Ala Gln Ala Leu Gln Gln Val Tyr
 465 470 475 480
 Asn Glu Met Glu Gln Asp Leu Arg Leu Leu Gly Ala Thr Ala Ile Glu
 485 490 495
 Asp Arg Leu Gln Asp Gly Val Pro Glu Thr Ile Lys Cys Leu Lys Lys
 500 505 510
 Ser Asn Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala
 515 520 525
 Val Asn Ile Gly Phe Ala Cys Glu Leu Leu Ser Glu Asn Met Leu Ile
 530 535 540
 Leu Glu Glu Lys Glu Ile Ser Arg Ile Leu Glu Thr Tyr Trp Glu Asn
 545 550 555 560
 Ser Asn Asn Leu Leu Thr Arg Glu Ser Leu Ser Gln Val Lys Leu Ala
 565 570 575
 Leu Val Ile Asn Gly Asp Phe Leu Ala Pro Val Pro Ala Val Pro Glu
 580 585 590
 Val Arg Ala Pro Ala Gly Cys Thr Ala Ser Pro Gly Leu Gln Ser Pro
 595 600 605
 Pro

<210> 3850

<211> 483

<212> PRT

<213> Homo sapiens

<400> 3850

Met Thr Met Lys Val Asp Met Ser Gly Leu Gln Ala Lys Asn Glu Ile
 1 5 10 15
 Leu Ser Glu Lys Leu Ser Asn Ala Glu Ser Lys Ile Asn Ser Leu Gln
 20 25 30
 Ile Gln Leu His Asn Thr Arg Asp Ala Leu Gly Arg Glu Ser Leu Ile
 35 40 45

Leu Glu Arg Val Gln Arg Asp Leu Ser Gln Thr Gln Cys Gln Lys Lys
 50 55 60
 Glu Thr Glu Gln Met Tyr Gln Ile Glu Gln Ser Lys Leu Lys Lys Tyr
 65 70 75 80
 Ile Ala Lys Gln Glu Ser Val Glu Glu Arg Leu Ser Gln Leu Gln Ser
 85 90 95
 Glu Asn Met Leu Leu Arg Gln Gln Leu Asp Asp Ala His Lys Lys Ala
 100 105 110
 Asn Ser Gln Glu Lys Thr Ser Ser Thr Ile Gln Asp Gln Phe His Ser
 115 120 125
 Ala Ala Lys Asn Leu Arg Ala Glu Ser Glu Lys Gln Ile Leu Ser Leu
 130 135 140
 Gln Glu Lys Asn Lys Glu Leu Met Asp Glu Tyr Asn His Leu Lys Glu
 145 150 155 160

 Arg Met Asp Gln Cys Glu Lys Glu Lys Ala Gly Arg Lys Val Val Met
 165 170 175
 Arg Glu Phe Gln Gln Glu Trp Thr Asp Leu Leu Lys Gln Gln Pro Thr
 180 185 190
 Ser Glu Ala Thr Ser Arg Cys His Ile Asn Leu Asp Glu Thr Gln Asp
 195 200 205
 Ser Lys Lys Lys Leu Gly Gln Ile Arg Ser Glu Ile Asp Leu Thr Glu
 210 215 220
 Ala Gln Glu Thr Val Pro Ser Arg Cys Leu His Leu Asp Ala Glu Asn
 225 230 235 240
 Glu Val Leu Gln Leu Gln Gln Thr Leu Phe Ser Met Lys Ala Ile Gln
 245 250 255
 Lys Gln Cys Glu Thr Leu Gln Lys Asn Lys Lys Gln Leu Lys Gln Glu
 260 265 270
 Val Val Asn Leu Lys Ser Tyr Met Glu Arg Asn Met Leu Glu Arg Gly
 275 280 285
 Lys Ala Glu Trp His Lys Leu Leu Ile Glu Glu Arg Ala Arg Lys Glu
 290 295 300
 Ile Glu Glu Lys Leu Asn Glu Ala Ile Leu Thr Leu Gln Lys Gln Ala
 305 310 315 320
 Ala Val Ser His Glu Gln Leu Val Gln Leu Arg Glu Asp Asn Thr Thr

325 330 335
 Ser Ile Lys Thr Gln Met Glu Leu Thr Ile Lys Asp Leu Glu Ser Glu
 340 345 350
 Ile Ser Arg Ile Lys Thr Ser Gln Ala Asp Phe Asn Lys Thr Glu Leu
 355 360 365
 Glu Arg Tyr Lys Glu Leu Tyr Leu Glu Glu Val Lys Val Arg Glu Ser
 370 375 380
 Leu Ser Asn Glu Leu Ser Arg Thr Asn Glu Met Ile Ala Glu Val Ser
 385 390 395 400
 Thr Gln Leu Thr Val Glu Lys Glu Gln Thr Arg Ser Arg Ser Leu Phe
 405 410 415
 Thr Ala Tyr Ala Thr Arg Pro Val Leu Glu Ser Pro Cys Val Gly Asn
 420 425 430
 Leu Asn Asp Ser Glu Gly Leu Asn Arg Lys His Ile Pro Arg Lys Lys
 435 440 445
 Arg Ser Ala Leu Lys Asp Met Glu Ser Tyr Leu Leu Lys Val Ser Tyr
 450 455 460
 Leu Phe Ser Phe Gly Val Gln Ile Ser Asp Arg Thr Leu Val Cys Tyr
 465 470 475 480
 Leu Val Lys

<210> 3851

<211> 365

<212> PRT

<213> Homo sapiens

<400> 3851

Met Val Arg Val Pro Ser Pro Phe Gly Pro Arg Glu Gln Ser Thr Tyr
 1 5 10 15
 Val Leu Val Arg Asp Ala Glu Ala Glu Asn Pro Gly Ala Pro Gly Ser
 20 25 30
 Pro Leu Asn Val Arg Cys Leu Asp Val Asn Arg Asp Cys Leu Ile Leu
 35 40 45
 Thr Trp Ala Pro Pro Ser Asp Thr Arg Gly Asn Pro Ile Thr Ala Tyr

50	55	60
Thr Ile Glu Arg Cys Gln Gly Glu Ser Gly Glu Trp Ile Ala Cys His		
65	70	75
Glu Ala Pro Gly Gly Thr Cys Arg Cys Pro Ile Gln Gly Leu Val Glu		
85	90	95
Gly Gln Ser Tyr Arg Phe Arg Val Arg Ala Ile Ser Arg Val Gly Ser		
100	105	110
Ser Val Pro Ser Lys Ala Ser Glu Leu Val Val Met Gly Asp His Asp		
115	120	125
Ala Ala Arg Arg Lys Thr Glu Ile Pro Phe Asp Leu Gly Asn Lys Ile		
130	135	140
Thr Ile Ser Thr Asp Ala Phe Glu Asp Thr Val Thr Ile Pro Ser Pro		
145	150	155
Pro Thr Asn Val His Ala Ser Glu Ile Arg Glu Ala Tyr Val Val Leu		
165	170	175
Ala Trp Glu Glu Pro Ser Pro Arg Gly Arg Ala Pro Leu Thr Tyr Ser		
180	185	190
Leu Glu Lys Ser Val Ile Gly Ser Gly Thr Trp Glu Ala Ile Ser Ser		
195	200	205
Glu Ser Pro Val Arg Ser Pro Arg Phe Ala Val Leu Asp Leu Glu Lys		
210	215	220
Lys Lys Ser Tyr Val Phe Arg Val Arg Ala Met Asn Gln Tyr Gly Leu		
225	230	235
Ser Asp Pro Ser Glu Pro Ser Glu Pro Ile Ala Leu Arg Gly Pro Pro		
245	250	255
Ala Thr Leu Pro Pro Pro Ala Gln Val Gln Ala Phe Arg Asp Thr Gln		
260	265	270
Thr Ser Val Ser Leu Thr Trp Asp Pro Val Lys Asp Pro Glu Leu Leu		
275	280	285
Gly Tyr Tyr Ile Tyr Ser Arg Lys Val Gly Thr Ser Glu Trp Gln Thr		
290	295	300
Val Asn Asn Lys Pro Ile Gln Gly Thr Arg Tyr Val Cys Pro Pro Val		
305	310	315
Ser Val Cys Ser His Thr Ala Ile Lys Thr Tyr Leu Arg Leu Gly Asn		
325	330	335
Phe Phe Tyr Lys Glu Lys Arg Phe Asn Gln Leu Thr Val Leu Arg Pro		

340 345 350
 Ile Gln Ala Ser Phe Ser Gly Glu Ala Ser Gly Asn Leu
 355 360 365

<210> 3852

<211> 566

<212> PRT

<213> Homo sapiens

<400> 3852

Met Ala Met Gly Arg Gly Glu Gly Leu Val Gly Asp Gly Pro Val Asp
 1 5 10 15
 Met Arg Thr Ser His Ser Asp Met Lys Ser Glu Arg Arg Pro Pro Ser
 20 25 30
 Pro Asp Val Ile Val Leu Ser Asp Asn Glu Gln Pro Ser Ser Pro Arg
 35 40 45
 Val Asn Gly Leu Thr Thr Val Ala Leu Lys Glu Thr Ser Thr Glu Ala
 50 55 60
 Leu Met Lys Ser Ser Pro Glu Glu Arg Glu Arg Met Ile Lys Gln Leu
 65 70 75 80
 Lys Glu Glu Leu Arg Leu Glu Glu Ala Lys Leu Val Leu Leu Lys Lys
 85 90 95
 Leu Arg Gln Ser Gln Ile Gln Lys Glu Ala Thr Ala Gln Lys Pro Thr
 100 105 110
 Gly Ser Val Gly Ser Thr Val Thr Thr Pro Pro Pro Leu Val Arg Gly
 115 120 125
 Thr Gln Asn Ile Pro Ala Gly Lys Pro Ser Leu Gln Thr Ser Ser Ala
 130 135 140
 Arg Met Pro Gly Ser Val Ile Pro Pro Pro Leu Val Arg Gly Gly Gln
 145 150 155 160
 Gln Ala Ser Ser Lys Leu Gly Pro Gln Ala Ser Ser Gln Val Val Met
 165 170 175
 Pro Pro Leu Val Arg Gly Ala Gln Gln Ile His Ser Ile Arg Gln His
 180 185 190
 Ser Ser Thr Gly Pro Pro Pro Leu Leu Leu Ala Pro Arg Ala Ser Val

195	200	205
Pro Ser Val Gln Ile Gln Gly Gln Arg Ile Ile Gln Gln Gly Leu Ile		
210	215	220
Arg Val Ala Asn Val Pro Asn Thr Ser Leu Leu Val Asn Ile Pro Gln		
225	230	235
Pro Thr Pro Ala Ser Leu Lys Gly Thr Thr Ala Thr Ser Ala Gln Ala		
245	250	255
Asn Ser Thr Pro Thr Ser Val Ala Ser Val Val Thr Ser Ala Glu Ser		
260	265	270
Pro Ala Ser Arg Gln Ala Ala Ala Lys Leu Ala Leu Arg Lys Gln Leu		
275	280	285
Glu Lys Thr Leu Leu Glu Ile Pro Pro Pro Lys Pro Pro Ala Pro Glu		
290	295	300
Met Asn Phe Leu Pro Ser Ala Ala Asn Asn Glu Phe Ile Tyr Leu Val		
305	310	315
Gly Leu Glu Glu Val Val Gln Asn Leu Leu Glu Thr Gln Ala Gly Arg		
325	330	335
Met Ser Ala Ala Thr Val Leu Ser Arg Glu Pro Tyr Met Cys Ala Gln		
340	345	350
Cys Lys Thr Asp Phe Thr Cys Arg Trp Arg Glu Glu Lys Ser Gly Ala		
355	360	365
Ile Met Cys Glu Asn Cys Met Thr Thr Asn Gln Lys Lys Ala Leu Lys		
370	375	380
Val Glu His Thr Ser Arg Leu Lys Ala Ala Phe Val Lys Ala Leu Gln		
385	390	395
Gln Glu Gln Glu Ile Glu Gln Arg Leu Leu Gln Gln Gly Thr Ala Pro		
405	410	415
Ala Gln Ala Lys Ala Glu Pro Thr Ala Ala Pro His Pro Val Leu Lys		
420	425	430
Gln Val Ile Lys Pro Arg Arg Lys Leu Ala Phe Arg Ser Gly Glu Ala		
435	440	445
Arg Asp Trp Ser Asn Gly Ala Val Leu Gln Ala Ser Ser Gln Leu Ser		
450	455	460
Arg Gly Ser Ala Thr Thr Pro Arg Gly Val Leu His Thr Phe Ser Pro		
465	470	475
Ser Pro Lys Leu Gln Asn Ser Ala Ser Ala Thr Ala Leu Val Ser Arg		

	485		490		495
Thr Gly Arg His Ser Glu Arg Thr Val Ser Ala Gly Lys Gly Ser Ala					
	500		505		510
Thr Ser Asn Trp Lys Lys Thr Pro Leu Ser Thr Gly Gly Thr Leu Ala					
	515		520		525
Phe Val Ser Pro Ser Leu Ala Val His Lys Ser Ser Ser Ala Val Asp					
	530		535		540
Arg Gln Arg Glu Tyr Leu Leu Asp Met Ile Pro Pro Arg Ser Ile Pro					
545		550		555	560
Gln Ser Ala Thr Trp Lys					
	565				

<210> 3853

<211> 357

<212> PRT

<213> Homo sapiens

<400> 3853

Met His Trp Leu Ala Ser Ala Thr Gln Thr Ser Ala Ser Ile Val Ser			
1	5	10	15
Ser Ser Leu Leu Ser Ala Val Asp Val Ser Ser Ser Leu Thr Met Ser			
20	25	30	
Glu Tyr Phe Gln Asn Thr Ser Leu Pro Gly Thr Ala Asn Ser Arg Gln			
35	40	45	
Phe Ser Leu Pro Val Val Ser Asn Ala Ala Phe Leu Thr Gly Ser Ile			
50	55	60	
Ser Asn Phe Ser Arg Ala Ser Ala Pro Ala Ile Ser Ser Ala Trp Leu			
65	70	75	80
Gln Pro Ser Ala Ser Gly Thr Ser Phe Gln Pro Leu Met Gly Ser Ala			
85	90	95	
Tyr Leu Tyr Gln His Ser Ser Thr Thr Met Leu Ser Gly Val Thr Gly			
100	105	110	
Gln Ser His Ile Cys Thr Ser Ala Ala Ser Tyr Pro Gly Val Phe Glu			
115	120	125	
Trp Asp Ser Thr Ala Ser Thr Val Lys Lys Ser Ser Ser Leu Arg Asp			

130	135	140	
Phe Thr Val Thr Val Ile Asp Gln Asn Thr Ala Val Ser Ser Met Ser			
145	150	155	160
Met Thr Ala Gln Tyr Tyr Lys Thr Ser Asp Thr Asn Thr Met Val Pro			
165	170	175	
Leu Tyr Pro Ser Leu Ser Ala Ser Leu Val Gln Gly Thr Leu Thr Gln			
180	185	190	
Ile Pro Asn Gln Gln Gly His Asn Leu Ser Leu Pro Cys Gln Ile Gly			
195	200	205	
Ser Gln Val Tyr Tyr Tyr Asn Gln Gly Thr Leu Gly Pro Gln Leu Ser			
210	215	220	
Cys Leu Gln Ser Tyr Gly Ser Val Ser Tyr Thr Gly Tyr Arg Ala Ser			
225	230	235	240
Ala His Gln Pro Glu Met Val Met Val Leu Lys Glu Val Gln Pro Thr			
245	250	255	
Asn Val Leu Pro Pro Val Ser Thr Ser Gly Met Tyr Tyr Ser Val Ser			
260	265	270	
Ser Gln Pro Ile Thr Glu Thr Ser Val Gln Val Met Glu Thr Ser Leu			
275	280	285	
Gly Met Asp Thr Ser Leu Gly Leu Gln Ser Pro Ser Gln Thr Phe Cys			
290	295	300	
Leu Pro Gln Thr Pro Glu Phe Ser Lys Ser Phe Ser Ser Arg Asn Thr			
305	310	315	320
Gln Thr Leu Glu Ser Asn Pro Ser Pro Glu Leu Gly Asp Ile Ser Ile			
325	330	335	
Thr Pro Val Gln Ser Pro Thr Asn Leu Leu Thr Leu Ser Pro Ala Pro			
340	345	350	
Ser Gln Glu Lys Lys			
355			

<210> 3854

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3854

Met Gln Gly Gly Glu Ala Glu Gly Gly Trp Gly Leu Glu Ser Gly Leu
 1 5 10 15
 Ser Pro Arg Pro Leu Leu Gln Ala Gly Asp Leu Gly Gln Val Ser Ser
 20 25 30
 Pro Leu Cys Gly Ala Gly Gly Ala Phe Ser Arg Leu Gly Gly Ser Ser
 35 40 45
 Gly Thr Gly Pro Glu Thr Gly Asp Leu Leu Ser Pro Ser Leu Ser His
 50 55 60
 Ser Leu His Leu Ser Pro Arg Leu Thr Pro Thr His Ser Ile Ser His
 65 70 75 80
 Ser Leu Ser Phe Ser His Arg Leu Thr Pro Cys Leu Ile Cys Ser Leu
 85 90 95
 Thr His Ser Phe Leu Ser Pro Ser Leu Ser Leu Cys Leu Ser Leu Pro
 100 105 110
 Leu Arg Leu Val His Thr Leu Thr Asn Gly Ala
 115 120

<210> 3855

<211> 906

<212> PRT

<213> Homo sapiens

<400> 3855

Met Ser Ala Thr Ile Ser Cys Lys Glu Phe Ala Asp Tyr Phe Ala Val
 1 5 10 15
 Pro Val Gln Asn Lys Met Asn Pro Ala Tyr Ile Phe Glu Val Glu Gly
 20 25 30
 Lys Pro His Ser Val Glu Glu Tyr Tyr Leu Asn Asp Leu Glu His Ile
 35 40 45
 His His Ser Lys Leu Ser Pro His Leu Leu Glu Glu Pro Val Ile Thr
 50 55 60
 Lys Asp Ile Tyr Glu Val Ala Val Ser Leu Ile Gln Met Phe Asp Asp
 65 70 75 80

Leu Asp Met Lys Glu Ser Gly Asn Lys Ala Trp Ser Gly Ala Gln Phe
 85 90 95
 Val Leu Glu Arg Ser Ser Val Leu Val Phe Leu Pro Gly Leu Gly Glu
 100 105 110
 Ile Asn Tyr Met His Glu Leu Leu Thr Ser Leu Val His Lys Arg Leu
 115 120 125
 Gln Val Tyr Pro Leu His Ser Ser Val Ala Leu Glu Glu Gln Asn Asn
 130 135 140
 Val Phe Leu Ser Pro Val Pro Gly Tyr Arg Lys Ile Ile Leu Ser Thr
 145 150 155 160
 Asn Ile Ala Glu Ser Ser Val Thr Val Pro Asp Val Lys Tyr Val Ile
 165 170 175
 Asp Phe Cys Leu Thr Arg Thr Leu Val Cys Asp Glu Asp Thr Asn Tyr
 180 185 190
 Gln Ser Leu Arg Leu Ser Trp Ala Ser Lys Thr Ser Cys Asn Gln Arg
 195 200 205
 Lys Gly Arg Ala Gly Arg Val Ser Arg Gly Tyr Cys Tyr Arg Leu Val
 210 215 220
 His Lys Asp Phe Trp Asp Asn Ser Ile Pro Asp His Val Val Pro Glu
 225 230 235 240
 Met Leu Arg Cys Pro Leu Gly Ser Thr Ile Leu Lys Val Lys Leu Leu
 245 250 255
 Asp Met Gly Glu Pro Arg Ala Leu Leu Ala Thr Ala Leu Ser Pro Pro
 260 265 270
 Gly Leu Ser Asp Ile Glu Arg Thr Ile Leu Leu Leu Lys Glu Val Gly
 275 280 285
 Ala Leu Ala Val Ser Gly Gln Arg Glu Asp Glu Asn Pro His Asp Gly
 290 295 300
 Glu Leu Thr Phe Leu Gly Arg Val Leu Ala Gln Leu Pro Val Asn Gln
 305 310 315 320
 Gln Leu Gly Lys Leu Ile Val Leu Gly His Val Phe Gly Cys Leu Asp
 325 330 335
 Glu Cys Leu Ile Ile Ala Ala Ala Leu Ser Leu Lys Asn Phe Phe Ala
 340 345 350
 Met Pro Phe Arg Gln His Leu Asp Gly Tyr Arg Asn Lys Val Asn Phe

355	360	365
Ser Gly Ser Ser Lys Ser Asp Cys Ile Ala Leu Val Glu Ala Phe Lys		
370	375	380
Thr Trp Lys Ala Cys Arg Gln Thr Gly Glu Leu Arg Tyr Pro Lys Asp		
385	390	395
Glu Leu Asn Trp Gly Arg Leu Asn Tyr Ile Gln Ile Lys Arg Ile Arg		
405	410	415
Glu Val Ala Glu Leu Tyr Glu Glu Leu Lys Thr Arg Ile Ser Gln Phe		
420	425	430
Asn Met His Val Asp Ser Arg Arg Pro Val Met Asp Gln Glu Tyr Ile		
435	440	445
Tyr Lys Gln Arg Phe Ile Leu Gln Val Val Leu Ala Gly Ala Phe Tyr		
450	455	460
Pro Asn Tyr Phe Thr Phe Gly Gln Pro Asp Glu Glu Met Ala Val Arg		
465	470	475
Glu Leu Ala Gly Lys Asp Pro Lys Thr Thr Val Val Leu Lys His Ile		
485	490	495
Pro Pro Tyr Gly Phe Leu Tyr Tyr Lys Gln Leu Gln Ser Leu Phe Arg		
500	505	510
Gln Cys Gly Gln Val Lys Ser Ile Val Phe Asp Gly Ala Lys Ala Phe		
515	520	525
Val Glu Phe Ser Arg Asn Pro Thr Glu Arg Phe Lys Thr Leu Pro Ala		
530	535	540
Val Tyr Met Ala Ile Lys Met Ser Gln Leu Lys Val Ser Leu Glu Leu		
545	550	555
Ser Val His Ser Ala Glu Glu Ile Glu Gly Lys Val Gln Gly Met Asn		
565	570	575
Val Ser Lys Leu Arg Asn Thr Arg Val Asn Val Asp Phe Gln Lys Gln		
580	585	590
Thr Val Asp Pro Met Gln Val Ser Phe Asn Thr Ser Asp Arg Ser Gln		
595	600	605
Thr Val Thr Asp Leu Leu Leu Thr Ile Asp Val Thr Glu Val Val Glu		
610	615	620
Val Gly His Phe Trp Gly Tyr Arg Ile Asp Glu Asn Asn Ser Glu Ile		
625	630	635
Leu Lys Lys Leu Thr Ala Glu Ile Asn Gln Leu Thr Leu Val Pro Leu		

	645		650		655
Pro Thr His	Pro His Pro Asp Leu Val Cys Leu Ala Pro Phe Ala Asp				
	660		665		670
Phe Asp Lys Gln Arg Tyr Phe Arg Ala Gln Val Leu Tyr Val Ser Gly					
	675		680		685
Asn Ser Ala Glu Val Phe Phe Val Asp Tyr Gly Asn Lys Ser His Val					
	690		695		700
Asp Leu His Leu Leu Met Glu Ile Pro Cys Gln Phe Leu Glu Leu Pro					
705		710		715	720
Phe Gln Ala Leu Glu Phe Lys Ile Cys Lys Met Arg Pro Ser Ala Lys					
	725		730		735
Ser Leu Val Cys Gly Lys His Trp Ser Asp Gly Ala Ser Gln Trp Phe					
	740		745		750
Ala Ser Leu Val Ser Gly Cys Thr Leu Leu Val Lys Val Phe Ser Val					
	755		760		765
Val His Ser Val Leu His Val Asp Val Tyr Gln Tyr Ser Gly Val Gln					
	770		775		780
Asp Ala Ile Asn Ile Arg Asp Val Leu Ile Gln Gln Gly Tyr Ala Glu					
785		790		795	800
Leu Thr Glu Glu Ser Tyr Glu Ser Lys Val Asn Ile Leu Arg Ala Ala					
	805		810		815
Ile Asn Lys Leu Val Cys Asp Gly Pro Asn Gly Cys Lys Cys Leu Gly					
	820		825		830
Pro Glu Arg Val Ala Gln Leu Gln Asp Ile Ala Arg Gln Lys Leu Leu					
	835		840		845
Gly Leu Phe Cys Gln Ser Lys Pro Arg Glu Lys Ile Val Pro Lys Trp					
	850		855		860
His Glu Lys Pro Tyr Glu Trp Asn Gln Val Asp Pro Lys Leu Val Met					
865		870		875	880
Glu Gln Ala Asp Arg Glu Ser Ser Arg Gly Lys Asn Thr Phe Leu Tyr					
	885		890		895
Gln Leu His Lys Leu Val Val Leu Gly Thr					
	900		905		

<211> 738

<212> PRT

<213> Homo sapiens

<400> 3856

Met Leu Lys Trp Ile Ser Trp Arg Gln Ser Lys Ala Asn Lys Ala Gln
 1 5 10 15
 Leu Ser Gly Gly Cys Glu Leu Thr Val Val Leu Gln Asp Phe Ser Ala
 20 25 30
 Gly His Ser Ser Glu Leu Thr Ile Gln Val Gly Gln Thr Val Glu Leu
 35 40 45
 Leu Glu Arg Pro Ser Glu Arg Pro Gly Trp Cys Leu Val Arg Thr Thr
 50 55 60
 Glu Arg Ser Pro Pro Leu Glu Gly Leu Val Pro Ser Ser Ala Leu Cys
 65 70 75 80
 Ile Ser His Ser Arg Ser Ser Val Glu Met Asp Cys Phe Phe Pro Leu
 85 90 95
 Val Lys Asp Ala Tyr Ser His Ser Ser Ser Glu Asn Gly Gly Lys Ser
 100 105 110
 Glu Ser Val Ala Asn Leu Gln Ala Gln Pro Ser Leu Asn Ser Ile His
 115 120 125
 Ser Ser Pro Gly Pro Lys Arg Ser Thr Asn Thr Leu Lys Lys Trp Leu
 130 135 140
 Thr Ser Pro Val Arg Arg Leu Asn Ser Gly Lys Ala Asp Gly Asn Ile
 145 150 155 160
 Lys Lys Gln Lys Lys Val Arg Asp Gly Arg Lys Ser Phe Asp Leu Gly
 165 170 175
 Ser Pro Lys Pro Gly Asp Glu Thr Thr Pro Gln Gly Asp Ser Ala Asp
 180 185 190
 Glu Lys Ser Lys Lys Gly Trp Gly Glu Asp Glu Pro Asp Glu Glu Ser
 195 200 205
 His Thr Pro Leu Pro Pro Pro Met Lys Ile Phe Asp Asn Asp Pro Thr
 210 215 220
 Gln Asp Glu Met Ser Leu Glu Gly Ser Ser Tyr Arg Gly Ser Leu Lys
 225 230 235 240
 Asp Pro Ala Gly Cys Leu Asn Glu Gly Met Ala Pro Pro Thr Pro Pro

	245		250		255
Lys Asn Pro Glu Glu Glu Gln Lys Ala Lys Ala Leu Arg Gly Arg Met					
	260		265		270
Phe Val Leu Asn Glu Leu Val Gln Thr Glu Lys Asp Tyr Val Lys Asp					
	275		280		285
Leu Gly Ile Val Val Glu Gly Phe Met Lys Arg Ile Glu Glu Lys Gly					
	290		295		300
Val Pro Glu Asp Met Arg Gly Lys Asp Lys Ile Val Phe Gly Asn Ile					
305		310		315	320
His Gln Ile Tyr Asp Trp His Lys Asp Phe Phe Leu Ala Glu Leu Glu					
	325		330		335
Lys Cys Ile Gln Glu Gln Asp Arg Leu Ala Gln Leu Phe Ile Lys His					
	340		345		350
Glu Arg Lys Leu His Ile Tyr Val Trp Tyr Cys Gln Asn Lys Pro Arg					
	355		360		365
Ser Glu Tyr Ile Val Ala Glu Tyr Asp Ala Tyr Phe Glu Glu Val Lys					
	370		375		380
Gln Glu Ile Asn Gln Arg Leu Thr Leu Ser Asp Phe Leu Ile Lys Pro					
385		390		395	400
Ile Gln Arg Ile Thr Lys Tyr Gln Leu Leu Leu Lys Asp Phe Leu Arg					
	405		410		415
Tyr Ser Glu Lys Ala Gly Leu Glu Cys Ser Asp Ile Glu Lys Ala Val					
	420		425		430
Glu Leu Met Cys Leu Val Pro Lys Arg Cys Asn Asp Met Met Asn Leu					
	435		440		445
Gly Arg Leu Gln Gly Phe Glu Gly Thr Leu Thr Ala Gln Gly Lys Leu					
	450		455		460
Leu Gln Gln Asp Thr Phe Tyr Val Ile Glu Leu Asp Ala Gly Met Gln					
465		470		475	480
Ser Arg Thr Lys Glu Arg Arg Val Phe Leu Phe Glu Gln Ile Val Ile					
	485		490		495
Phe Ser Glu Leu Leu Arg Lys Gly Ser Leu Thr Pro Gly Tyr Met Phe					
	500		505		510
Lys Arg Ser Ile Lys Met Asn Tyr Leu Val Leu Glu Glu Asn Val Asp					
	515		520		525
Asn Asp Pro Cys Lys Phe Ala Leu Met Asn Arg Glu Thr Ser Glu Arg					

530	535	540	
Val Val Leu Gln Ala	Ala Asn Ala Asp Ile Gln Gln Ala Trp Val Gln		
545	550	555	560
Asp Ile Asn Gln Val Leu Glu Thr Gln Arg Asp Phe Leu Asn Ala Leu			
	565	570	575
Gln Ser Pro Ile Glu Tyr Gln Arg Lys Glu Arg Ser Thr Ala Val Met			
	580	585	590
Arg Ser Gln Pro Ala Arg Leu Pro Gln Ala Ser Pro Arg Pro Tyr Ser			
	595	600	605
Ser Val Pro Ala Gly Ser Glu Lys Pro Pro Lys Gly Ser Ser Tyr Asn			
610	615	620	
Pro Pro Leu Pro Pro Leu Lys Ile Ser Thr Ser Asn Gly Ser Pro Gly			
625	630	635	640
Phe Glu Tyr His Gln Pro Gly Asp Lys Phe Glu Ala Ser Lys Asn Asp			
	645	650	655
Leu Gly Gly Cys Asn Gly Thr Ser Ser Met Ala Val Ile Lys Asp Tyr			
	660	665	670
Tyr Ala Leu Lys Glu Asn Glu Ile Cys Val Ser Gln Gly Glu Val Val			
	675	680	685
Gln Val Leu Ala Val Asn Gln Gln Asn Met Cys Leu Val Tyr Gln Pro			
690	695	700	
Ala Ser Asp His Ser Pro Ala Ala Glu Gly Trp Val Pro Gly Ser Ile			
705	710	715	720
Leu Ala Pro Leu Thr Lys Ala Thr Ala Ala Glu Ser Ser Asp Gly Ser			
	725	730	735
Ile Lys			

<210> 3857

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3857

Met Lys Pro Ser Val Thr Val Leu Phe Pro Thr Phe Gln Leu Met Phe

1	5	10	15
His Val Asp Asn Gly Ala Gly Arg Phe Thr Ala Val Tyr Asp Ala Gly			
20	25	30	
Val Pro Gly His Leu Cys Asp Gly Gln Trp His Lys Val Thr Ala Asn			
35	40	45	
Lys Ile Lys His Arg Ile Glu Leu Thr Val Asp Gly Asn Gln Val Glu			
50	55	60	
Ala Gln Ser Pro Asn Pro Ala Ser Thr Ser Ala Asp Thr Asn Asp Pro			
65	70	75	80
Val Phe Val Gly Gly Phe Pro Gly Glu Cys Trp Leu Pro Gln Gln Gln			
85	90	95	
Phe Leu Cys Ser Leu Met Leu Leu Val Leu Lys Thr Phe Ile Phe Thr			
100	105	110	
Cys Val			

<210> 3858

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3858

Met Ser Ala Leu Val Cys Leu Leu Pro Leu Cys Leu Gln Pro Ile Ser			
1	5	10	15
Val Leu Phe Leu Asp His Phe Ser Arg Glu Thr Val Pro Lys Thr Pro			
20	25	30	
Ile Pro Ser Val Cys Thr Cys Ser Gln Ser Ile Ser Leu Ser Ile Ser			
35	40	45	
Val Cys Cys Tyr Cys Ser Arg Gly Val Ser Leu Ser Val Pro Ala Ser			
50	55	60	
His Ala Cys Leu Pro Val Ser Pro Ala Leu Val His Ala Ala His Ile			
65	70	75	80
Arg Thr Leu Val Thr Pro Pro Phe Ser Leu Gln Pro His Leu Pro Ser			
85	90	95	
Gly Ile Phe Ile Ser Val Pro Pro Ala His Ala Asn Leu His Leu Leu			

	100		105		110										
Leu	Tyr	Pro	Ala	Pro	Leu	Pro	Val	Ser	Val	Pro	Gly	Val	Pro	Leu	Cys
	115		120		125										
His	Ala	Ala	Val	Ala	Ser	Glu	Leu	Pro	Phe	Cys	Leu	Asp	Pro	Leu	
	130		135		140										

<210> 3859

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3859

Met	Gln	Asp	Pro	Glu	Gly	Ser	Lys	Glu	Ser	Thr	Val	Arg	Arg	Lys	Ser
1				5				10						15	
Thr	Val	Arg	Gln	Leu	Ser	Phe	Arg	Asp	Val	Val	Leu	Arg	Cys	Arg	Pro
			20					25					30		
His	Pro	Gln	Val	His	Pro	Gly	Ser	Gln	Pro	Ser	Glu	Gly	Thr	Met	Glu
			35					40					45		
Ile	Gln	Leu	Leu	Thr	Leu	Gly	Ser	Arg	Arg	Ile	Pro	Asp	His	Ser	Cys
			50					55					60		
Val	His	Pro	Gly	Arg	Glu	Pro	Ser	Glu	Gly	Thr	Val	Glu	Ile	Gln	Leu
			65					70					75		80
Leu	Thr	Leu	Ala	Ser	Ile	Arg	Ile	Pro	Asp	Ser	Ser	Gly	Ser	Gln	Thr
						85							90		95
Ser	Asp	Asn	Ser	Lys	Ile	Ala	Thr	Leu	Tyr	Ser	Ser	Leu	Phe	His	Val
						100							105		110
Cys	Gln	Phe	Lys	Cys	Thr	Ser	Gln	Ser	Leu	Val	Leu	Gln	Met	Gln	Lys
						115							120		125

<210> 3860

<211> 694

<212> PRT

<213> Homo sapiens

<400> 3860

Met	Asp	Leu	His	Lys	Gln	Trp	Glu	Asn	Thr	Glu	Thr	Asn	Trp	His	Lys
1				5					10					15	
Glu	Lys	Met	Glu	Leu	Leu	Asp	Gln	Phe	Asp	Asn	Glu	Arg	Lys	Glu	Trp
			20					25					30		
Glu	Ser	Gln	Trp	Lys	Ile	Met	Gln	Lys	Lys	Ile	Glu	Glu	Leu	Cys	Arg
		35					40					45			
Glu	Val	Lys	Leu	Trp	Arg	Lys	Ile	Asn	Ile	Asn	Glu	Ser	Ala	Lys	Ile
	50					55					60				
Ile	Asp	Leu	Tyr	His	Glu	Lys	Thr	Ile	Pro	Glu	Lys	Val	Ile	Glu	Ser
65				70					75					80	
Ser	Pro	Asn	Tyr	Pro	Asp	Leu	Gly	Gln	Ser	Glu	Phe	Ile	Arg	Thr	Asn
			85						90					95	
His	Lys	Asp	Gly	Leu	Arg	Lys	Glu	Asn	Lys	Arg	Glu	Gln	Ser	Leu	Val
			100						105					110	
Ser	Gly	Gly	Asn	Gln	Met	Cys	Lys	Glu	Gln	Lys	Ala	Thr	Lys	Lys	Ser
		115					120						125		
Lys	Val	Gly	Phe	Leu	Asp	Pro	Leu	Ala	Thr	Asp	Asn	Gln	Lys	Glu	Cys
		130					135					140			
Glu	Ala	Trp	Pro	Asp	Leu	Arg	Thr	Ser	Glu	Glu	Asp	Ser	Lys	Ser	Cys
145				150					155					160	
Ser	Gly	Ala	Leu	Ser	Thr	Ala	Leu	Glu	Glu	Leu	Ala	Lys	Val	Ser	Glu
			165						170					175	
Glu	Leu	Cys	Ser	Phe	Gln	Glu	Glu	Ile	Arg	Lys	Arg	Ser	Asn	His	Arg
			180						185					190	
Arg	Met	Lys	Ser	Asp	Ser	Phe	Leu	Gln	Glu	Met	Pro	Asn	Val	Thr	Asn
		195					200						205		
Ile	Pro	His	Gly	Asp	Pro	Met	Ile	Asn	Asn	Asp	Gln	Cys	Ile	Leu	Pro
	210					215					220				
Ile	Ser	Leu	Glu	Lys	Glu	Lys	Gln	Lys	Asn	Arg	Lys	Asn	Leu	Ser	Cys
225				230					235					240	
Thr	Asn	Val	Leu	Gln	Ser	Asn	Ser	Thr	Lys	Lys	Cys	Gly	Ile	Asp	Thr
			245						250					255	
Ile	Asp	Leu	Lys	Arg	Asn	Glu	Thr	Pro	Pro	Val	Pro	Pro	Pro	Arg	Ser
		260							265					270	

Thr Ser Arg Asn Phe Pro Ser Ser Asp Ser Glu Gln Ala Tyr Glu Arg
 275 280 285
 Trp Lys Glu Arg Leu Asp His Asn Ser Trp Val Pro His Glu Gly Arg
 290 295 300
 Ser Lys Arg Asn Tyr Asn Pro His Phe Pro Leu Arg Gln Gln Glu Met
 305 310 315 320
 Ser Met Leu Tyr Pro Asn Glu Gly Lys Thr Ser Lys Asp Gly Ile Ile
 325 330 335
 Phe Ser Ser Leu Val Pro Glu Val Lys Ile Asp Ser Lys Pro Pro Ser
 340 345 350
 Asn Glu Asp Val Gly Leu Ser Met Trp Ser Cys Asp Ile Gly Ile Gly
 355 360 365
 Ala Lys Arg Ser Pro Ser Thr Ser Trp Phe Gln Lys Thr Cys Ser Thr
 370 375 380
 Pro Ser Asn Pro Lys Tyr Glu Met Val Ile Pro Asp His Pro Ala Lys
 385 390 395 400
 Ser His Pro Asp Leu His Val Ser Asn Asp Cys Ser Ser Ser Val Ala
 405 410 415
 Glu Ser Ser Ser Pro Leu Arg Asn Phe Ser Cys Gly Phe Glu Arg Thr
 420 425 430
 Thr Arg Asn Glu Lys Leu Ala Ala Lys Thr Asp Glu Phe Asn Arg Thr
 435 440 445
 Val Phe Arg Thr Asp Arg Asn Cys Gln Ala Ile Gln Gln Asn His Ser
 450 455 460
 Cys Ser Lys Ser Ser Glu Asp Leu Lys Pro Cys Asp Thr Ser Ser Thr
 465 470 475 480
 His Thr Gly Ser Ile Ser Gln Ser Asn Asp Val Ser Gly Ile Trp Lys
 485 490 495
 Thr Asn Ala His Met Pro Val Pro Met Glu Asn Val Pro Asp Asn Pro
 500 505 510
 Thr Lys Lys Ser Thr Thr Gly Leu Val Arg Gln Met Gln Gly His Leu
 515 520 525
 Ser Pro Arg Ser Tyr Arg Asn Met Leu His Glu His Asp Trp Arg Pro
 530 535 540
 Ser Asn Leu Ser Gly Arg Pro Arg Ser Ala Asp Pro Arg Ser Asn Tyr
 545 550 555 560

Gly Val Val Glu Lys Leu Leu Lys Thr Tyr Glu Thr Ala Thr Glu Ser
 565 570 575
 Ala Leu Gln Asn Ser Lys Cys Phe Gln Asp Asn Trp Thr Lys Cys Asn
 580 585 590
 Ser Asp Val Ser Gly Gly Ala Thr Leu Ser Gln His Leu Glu Met Leu
 595 600 605
 Gln Met Glu Gln Gln Phe Gln Gln Lys Thr Ala Val Trp Gly Gly Gln
 610 615 620
 Glu Val Lys Gln Gly Ile Asp Pro Lys Lys Ile Thr Glu Glu Ser Met
 625 630 635 640
 Ser Val Asn Ala Ser His Gly Lys Gly Phe Ser Arg Pro Ala Arg Pro
 645 650 655
 Ala Asn Arg Arg Leu Pro Ser Arg Trp Ala Ser Arg Ser Pro Ser Ala
 660 665 670
 Pro Pro Ala Leu Arg Arg Thr Thr His Asn Tyr Thr Ile Ser Leu Arg
 675 680 685
 Ser Glu Ala Leu Met Val
 690

<210> 3861

<211> 1082

<212> PRT

<213> Homo sapiens

<400> 3861

Met Asp Thr Ser Ser Ser Ala His Pro His Leu Pro Ser Leu Lys Ala
 1 5 10 15
 Glu Glu Ser Gln Met Lys Thr Gln Val Ile Thr His Arg Glu Asn Ser
 20 25 30
 Arg Leu Ile Met Gln Lys Gln Lys Lys Glu Leu Glu Ala Ser Asn Ala
 35 40 45
 Lys Gln Ser Ile Gln Leu Gln Lys Leu Phe Gln Arg Asn Val Leu Asp
 50 55 60
 Ser Phe Tyr Ser Tyr Val Pro Leu Ser Pro Lys Arg Lys Asp Gln Lys
 65 70 75 80

Gly Arg Leu Thr Ile Arg Asp Leu Lys Arg Glu Leu Ser Thr Lys Tyr			
	85	90	95
Leu Thr Met Lys Ile Gln Asn His Pro Ile Pro Gln Met Leu Asn Ile			
	100	105	110
Thr Gly Arg Gly Thr Pro Ser Asn Arg Lys Lys Leu Glu Tyr Asp Val			
	115	120	125
Lys Leu Lys Asn Ile Ala Ser Trp Ser Lys Asp Val Ser Gly Ile Phe			
	130	135	140
Ile Arg Ser Leu Ser Ile Ser Ile Met Arg Ser Pro His Thr Asp Pro			
	145	150	155
Lys Thr Asn Leu Glu Arg Glu Lys Arg Ile Cys Leu Pro Lys Phe Gln			
	165	170	175
Glu Lys Ser Pro Asn Thr Ser Glu Met Ser Lys Arg Asp Thr Leu Thr			
	180	185	190
Ile Val Lys Gly Glu Gln Asn Phe Thr Asn Thr Val Pro Gln Asp Pro			
	195	200	205
Gln Pro Phe Ala Val Asp Lys Gln Gln Met Gln Lys Leu Pro Asn Val			
	210	215	220
Lys Ser Glu Ala Asn Leu Arg Ser Glu Met Asn Lys Lys Tyr Leu Lys			
	225	230	235
Ala Gln Thr Lys Glu Arg Ile Val Pro Glu His Asp Val Ser Arg Ile			
	245	250	255
Ile Lys Lys Pro Asp Leu Arg Ile Ile Glu Gln Glu Glu Lys Ile Leu			
	260	265	270
Lys Arg Ile Leu Thr Pro Thr Glu Cys Pro Ser Met Leu Glu Asp Pro			
	275	280	285
Lys Leu Pro Lys Gln Arg Asp Gln Ser Glu Pro Val Trp Asp Met Thr			
	290	295	300
Thr Gln Lys Val Gln Gln Gln Lys Ala Phe Pro Gly Thr Val Pro Ile			
	305	310	315
Pro Pro Gln Val Lys Ser Ser Glu Val Lys Ile Val Ala Asp Ser Thr			
	325	330	335
Asn Ala Glu His Leu Leu Pro Ile Cys Glu Ala Thr Lys Ala Ile Ser			
	340	345	350
Glu Ser Gln Val Lys Asn Met Ile Gln Asp Lys Val Ser Ser Asp Lys			
	355	360	365

Leu Asp Asn Ile Gln Ala Tyr Lys Pro Asp Asp Leu Lys Ser Pro Pro
 370 375 380
 Phe Pro Glu Gly Pro Asp Thr Ile Ser Thr Ala Ile Tyr Pro Lys Thr
 385 390 395 400
 Gln His Lys Ser Leu Leu Glu Gln Phe Thr Pro Lys Glu Lys Asn Lys
 405 410 415
 Leu Thr Ser His Leu Glu Ser Lys Ala Leu Glu Ile Gln Leu Asn Leu
 420 425 430
 Ile Pro Glu Met Ala Arg Lys Ser Leu Gln Met Phe Asn Phe Tyr Pro
 435 440 445
 Lys Gly Thr Ile Ser Lys Asp Asn Ser Trp Arg Phe Tyr Ser Arg His
 450 455 460
 Lys Thr Met Asn Phe Met Ser Leu Glu Gly Thr Asp Thr Ile Glu Pro
 465 470 475 480
 Asn Ser Lys His Lys His Gln Lys Asp Ser Pro Leu Ala Ser Asn Met
 485 490 495
 Lys Thr Leu Ile Val Asp Val Ser Ser Asp Ser Glu Glu Thr Ile Thr
 500 505 510
 Lys Leu Gln Ser Ile Asn Lys Leu Glu Asn Gly Thr Ser Ala Val Thr
 515 520 525
 Ser Ala Ser Glu Met Leu Leu Pro His Thr Leu Gln Asn His Ser Val
 530 535 540
 Glu Glu Lys Gly Lys Leu Leu Met His Phe Ser Val Lys Thr Leu Glu
 545 550 555 560
 Ile Gln Met Lys Ala Phe Pro Arg Ile Val Arg Glu Ser Tyr Ala Met
 565 570 575
 Thr Ser Ala His Glu Arg Lys Lys Pro Leu Ser Asn Cys Ile His Pro
 580 585 590
 Gly Phe Thr Gly Pro Lys Arg Gln Asn Arg Ile Leu Leu Leu Ser Glu
 595 600 605
 Glu Lys Ser Leu His Gln Ile Asp Leu Asp Leu Gln Tyr Lys Tyr Leu
 610 615 620
 Arg Phe Pro Leu Gly Leu Pro Val Gly Ser Thr Phe Pro Lys Pro Asn
 625 630 635 640
 Val Leu Pro Lys His Ser Lys Leu Asn Thr Ile Ala Val Cys Lys Asn
 645 650 655

Val Asn Ala Gly Gly Gln Ser Gly Ser Leu Ser Ile Asp Thr Glu Leu
 660 665 670
 Leu Glu Gln His Ile Ser Phe Lys Lys Gln Ser Pro His Glu Asn Ser
 675 680 685
 Ser Leu Ile Arg Lys Phe Pro Gln Pro Thr Leu Val Cys Ala Ser Asp
 690 695 700
 Arg Asp Leu His Ser Pro Arg Lys Lys Asp Thr Gln Val Leu Ser Glu
 705 710 715 720
 Ser Glu Phe His Val Thr Pro Glu Lys Asn Lys Gln Tyr His Val Trp
 725 730 735
 Phe Gln Glu Arg Asn Thr Cys Glu Ser Val Asp Leu Arg Thr Gln Arg
 740 745 750
 Asn Ala Thr Gly Ser Ala Val Ser Cys Glu Thr Gln Ile Ser Glu Asp
 755 760 765
 Phe Val Asp Ile Gln Thr Asp Ile Glu Ser Pro Ala Asp Leu Asp Glu
 770 775 780
 Cys Ser Cys Leu Glu Val Ser Glu Ser Glu Glu Cys Val Phe Leu Glu
 785 790 795 800
 Ala Asn Ser Tyr Leu Ser Gln Glu Ser Glu Asn Ile Leu Phe Glu Leu
 805 810 815
 Gln Thr Gly Ile Pro Leu Glu Asn Val Tyr Lys Ile Thr Thr Asp Leu
 820 825 830
 Lys Ser Phe Tyr Ser Glu Asp Ser Gly Ser His Cys Thr Arg Glu Cys
 835 840 845
 Arg Lys Glu Thr Leu Ile Ile Thr Pro Pro Ser Cys Lys Ser His Lys
 850 855 860
 Ser Ser Lys Tyr Arg Ser Ser Ser Lys Met Lys Ser Pro Asp Trp Leu
 865 870 875 880
 Cys His Ser Ser Ser Asn Thr Ala Glu Ile Gln Ser Arg Ser Ser Ser
 885 890 895
 Val Ser Phe Ser Glu Glu Lys Ile Ser Trp Thr Thr Asn Ser Arg Thr
 900 905 910
 Ser Tyr Ser Ser Ala Pro Leu Thr Glu Ser Asn Ile Lys Ser His Leu
 915 920 925
 Ala Lys Asn Gln Gly Lys Ser His Arg His Pro Glu Ser Gln Glu Arg
 930 935 940

Lys Lys Ala Arg Ser Asp Leu Phe Arg Lys Asn Ser Ser His Trp Asp
 945 950 955 960
 His Asp Tyr Ser Cys Thr His Ser Lys Gly Lys Arg Asp Arg Lys Lys
 965 970 975
 Arg Val Tyr Asp Tyr Glu Ser Glu Arg Leu Asp Cys Phe Gln Ser Lys
 980 985 990
 His Lys Ser Ala Ser Lys Pro His His Asp Asp Ile Asn Phe Tyr Ser
 995 1000 1005
 Glu Arg Lys Gln Asn Arg Pro Phe Phe Phe Ala Cys Val Pro Ala Asp
 1010 1015 1020
 Ser Leu Glu Val Ile Pro Lys Thr Ile Arg Trp Thr Ile Pro Pro Glu
 1025 1030 1035 1040
 Thr Leu Arg Lys Arg Asn Phe Arg Ile Pro Leu Val Ala Lys Ile Ser
 1045 1050 1055
 Ser Ser Trp Asn Ile Trp Ser Ser Ser Lys Lys Leu Leu Gly Ser Leu
 1060 1065 1070
 Ser Gly Ser Leu Thr Thr Val Phe His Ser
 1075 1080

<210> 3862

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3862

Met Ser Ser Thr Lys Asn Thr Ser Gln Ser Ile Arg Glu Lys Phe Arg
 1 5 10 15
 Trp Ala Pro Phe Tyr Asp Cys Phe Pro Pro Gln Thr Cys Phe Trp Met
 20 25 30
 Ile Gly Cys His Asp Pro Gly Val Leu Gly Phe His Thr Cys Leu Gly
 35 40 45
 Gln Glu Ser Ser Leu Cys Leu His Val Pro Ser Asp Gly Phe Val Val
 50 55 60
 His Gln Gly Arg Ala Gly Gly Asn Pro Thr Val Ala Asp Leu Arg Leu

65 70 75 80
 Leu Glu Lys Leu Val Leu His Pro Thr Cys Pro Ser Ser Leu Ile Pro
 85 90 95
 Glu Gly His Pro Val Pro Leu Leu Leu Gly Lys Val Pro Pro Ser Thr
 100 105 110
 Glu Ser Phe Gly Cys His Gly Cys Gln Gly Ala Lys Gly Thr Gly Phe
 115 120 125
 Cys Trp Val Gln Arg Arg Trp His Gln Gly Tyr Leu Gln Val Ala Gly
 130 135 140
 Cys Arg Cys Gly Val Val Cys
 145 150

<210> 3863

<211> 786

<212> PRT

<213> Homo sapiens

<400> 3863

Met Phe Thr Asp Phe Leu Ser Phe Met Val Leu Phe Asn Phe Ile Ile
 1 5 10 15
 Pro Val Ser Met Tyr Val Thr Val Glu Met Gln Lys Phe Leu Gly Ser
 20 25 30
 Phe Phe Ile Ser Trp Asp Lys Asp Phe Tyr Asp Glu Glu Ile Asn Glu
 35 40 45
 Gly Ala Leu Val Asn Thr Ser Asp Leu Asn Glu Glu Leu Gly Gln Val
 50 55 60
 Asp Tyr Val Phe Thr Asp Lys Thr Gly Thr Leu Thr Glu Asn Ser Met
 65 70 75 80
 Glu Phe Ile Glu Cys Cys Ile Asp Gly His Lys Tyr Lys Gly Val Thr
 85 90 95
 Gln Glu Val Asp Gly Leu Ser Gln Thr Asp Gly Thr Leu Thr Tyr Phe
 100 105 110
 Asp Lys Val Asp Lys Asn Arg Glu Glu Leu Phe Leu Arg Ala Leu Cys
 115 120 125
 Leu Cys His Thr Val Glu Ile Lys Thr Asn Asp Ala Val Asp Gly Ala

130	135	140	
Thr Glu Ser Ala Glu Leu Thr Tyr Ile Ser Ser Ser Pro Asp Glu Ile			
145	150	155	160
Ala Leu Val Lys Gly Ala Lys Arg Tyr Gly Phe Thr Phe Leu Gly Asn			
165	170	175	
Arg Asn Gly Tyr Met Arg Val Glu Asn Gln Arg Lys Glu Ile Glu Glu			
180	185	190	
Tyr Glu Pro Leu His Thr Leu Asn Phe Asp Ala Val Arg Arg Arg Met			
195	200	205	
Ser Val Ile Val Lys Thr Gln Glu Gly Asp Ile Leu Leu Phe Cys Lys			
210	215	220	
Gly Ala Asp Ser Ala Val Phe Pro Arg Val Gln Asn His Glu Ile Glu			
225	230	235	240
Leu Thr Lys Val His Val Glu Arg Asn Ala Met Asp Gly Tyr Arg Thr			
245	250	255	
Leu Cys Val Ala Phe Lys Glu Ile Ala Pro Asp Asp Tyr Glu Arg Ile			
260	265	270	
Asn Arg Gln Leu Ile Glu Ala Lys Met Ala Leu Gln Asp Arg Glu Glu			
275	280	285	
Lys Met Glu Lys Val Phe Asp Asp Ile Glu Thr Asn Met Asn Leu Ile			
290	295	300	
Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Asp Gln Ala Ala Glu Thr			
305	310	315	320
Ile Glu Ala Leu His Ala Ala Gly Leu Lys Val Trp Val Leu Thr Gly			
325	330	335	
Asp Lys Met Glu Thr Ala Lys Ser Thr Cys Tyr Ala Cys Arg Leu Phe			
340	345	350	
Gln Thr Asn Thr Glu Leu Leu Glu Leu Thr Thr Lys Thr Ile Glu Glu			
355	360	365	
Ser Glu Arg Lys Glu Asp Arg Leu His Glu Leu Leu Ile Glu Tyr Arg			
370	375	380	
Lys Lys Leu Leu His Glu Phe Pro Lys Ser Thr Arg Ser Phe Lys Lys			
385	390	395	400
Ala Trp Thr Glu His Gln Glu Tyr Gly Leu Ile Ile Asp Gly Ser Thr			
405	410	415	
Leu Ser Leu Ile Leu Asn Ser Ser Gln Asp Ser Ser Ser Asn Asn Tyr			

420	425	430	
Lys Ser Ile Phe Leu Gln Ile Cys Met Lys Cys Thr Ala Val Leu Cys			
435	440	445	
Cys Arg Met Ala Pro Leu Gln Lys Ala Gln Ile Val Arg Met Val Lys			
450	455	460	
Asn Leu Lys Gly Ser Pro Ile Thr Leu Ser Ile Gly Asp Gly Ala Asn			
465	470	475	480
Asp Val Ser Met Ile Leu Glu Ser His Val Gly Ile Gly Ile Lys Gly			
485	490	495	
Lys Glu Gly Arg Gln Ala Ala Arg Asn Ser Asp Tyr Ser Val Pro Lys			
500	505	510	
Phe Lys His Leu Lys Lys Leu Leu Leu Ala His Gly His Leu Tyr Tyr			
515	520	525	
Val Arg Val Ala His Leu Val Gln Tyr Phe Phe Tyr Lys Asn Leu Cys			
530	535	540	
Phe Ile Leu Pro Gln Phe Leu Tyr Gln Phe Phe Cys Gly Phe Ser Gln			
545	550	555	560
Gln Pro Leu Tyr Asp Ala Ala Tyr Leu Thr Met Tyr Asn Ile Cys Phe			
565	570	575	
Thr Ser Leu Pro Ile Leu Ala Tyr Ser Leu Leu Glu Gln His Ile Asn			
580	585	590	
Ile Asp Thr Leu Thr Ser Asp Pro Arg Leu Tyr Met Lys Ile Ser Gly			
595	600	605	
Asn Ala Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu Ala			
610	615	620	
Ala Phe Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe Gln			
625	630	635	640
Thr Ala Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr Phe			
645	650	655	
Gly Thr Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys Leu			
660	665	670	
Ala Leu Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile Trp			
675	680	685	
Gly Ser Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly Ile			
690	695	700	
Ile Trp Pro Phe Leu Lys Gln Gln Arg Met Tyr Phe Val Phe Ala Gln			

705 710 715 720
 Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile Phe
 725 730 735
 Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val Arg
 740 745 750
 Arg Arg Ser Ala Arg Val Thr Lys Arg Leu Pro Ser Ser Gly Thr Ser
 755 760 765
 Ala Ile Phe Met Leu Ser Gln Thr Ser Ser Asn His Ser Phe Ser Trp
 770 775 780
 Ser Glu
 785

<210> 3864

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3864

Met Ser Ser Arg Ser Leu His Ser Gln Gln Trp Thr Trp Arg Met Gly
 1 5 10 15
 Ser Ala Arg Pro Thr Leu Thr Gly Ser Ala His Pro Thr Leu Arg Gly
 20 25 30
 Ser Ala Arg Pro Thr Leu Thr Gly Ser Ala His Pro Thr Leu Thr Gly
 35 40 45
 Ser Ala His Pro His Ser Trp Pro Cys Pro Ala Pro Gly Ala Ile Gly
 50 55 60
 Val Ala Leu Ile Gln Pro Leu Phe Leu Ser Gly Pro Phe Pro His Val
 65 70 75 80
 Ala Leu His Thr His Pro His Ser Gly Pro Ser Ala Thr Glu Gln Asn
 85 90 95
 His Ala Thr Pro Phe Thr Arg Pro Pro Arg Arg Gly Glu Gly Leu Pro
 100 105 110
 Ala Glu Cys Leu Ala Leu His Gln His Leu Leu Ser Ser Pro Thr Thr
 115 120 125
 Pro Ala Pro Ala Ser Ser Arg Pro Arg Ser Ser Ser Ser Ser Glu Pro

130
His Leu
145

135

140

<210> 3865

<211> 854

<212> PRT

<213> Homo sapiens

<400> 3865

Met Lys Val Glu Ala Cys Thr Trp Ala Gly Tyr Ser Gly Leu Tyr Glu
1 5 10 15
Ala Ile Glu Ser Trp Asp Phe Lys Lys Ile Glu Lys Leu Glu Glu Tyr
20 25 30
Arg Leu Leu Leu Lys Arg Leu Gln Pro Glu Phe Lys Thr Arg Ile Ile
35 40 45
Pro Thr Asp Ile Ile Ser Asp Leu Ser Glu Cys Leu Ile Asn Gln Glu
50 55 60
Cys Glu Glu Ile Leu Gln Ile Cys Ser Thr Lys Gly Met Met Ala Gly
65 70 75 80
Ala Glu Lys Leu Val Glu Cys Leu Leu Arg Ser Asp Lys Glu Asn Trp
85 90 95
Pro Lys Thr Leu Lys Leu Ala Leu Glu Lys Glu Arg Asn Lys Phe Ser
100 105 110
Glu Leu Trp Ile Val Glu Lys Gly Ile Lys Asp Val Glu Thr Glu Asp
115 120 125
Leu Glu Asp Lys Met Glu Thr Ser Asp Ile Gln Ile Phe Tyr Gln Glu
130 135 140
Asp Pro Glu Cys Gln Asn Leu Ser Glu Asn Ser Cys Pro Pro Ser Glu
145 150 155 160
Val Ser Asp Thr Asn Leu Tyr Ser Pro Phe Lys Pro Arg Asn Tyr Gln
165 170 175
Leu Glu Leu Ala Leu Pro Ala Met Lys Gly Lys Asn Thr Ile Ile Cys
180 185 190
Ala Pro Thr Gly Cys Gly Lys Thr Phe Val Ser Leu Leu Ile Cys Glu

195	200	205
His His Leu Lys Lys Phe Pro Gln Gly Gln Lys Gly Lys Val Val Phe		
210	215	220
Phe Ala Asn Gln Ile Pro Val Tyr Glu Gln Gln Lys Ser Val Phe Ser		
225	230	235
Lys Tyr Phe Glu Arg His Gly Tyr Arg Val Thr Gly Ile Ser Gly Ala		
245	250	255
Thr Ala Glu Asn Val Pro Val Glu Gln Ile Val Glu Asn Asn Asp Ile		
260	265	270
Ile Ile Leu Thr Pro Gln Ile Leu Val Asn Asn Leu Lys Lys Gly Thr		
275	280	285
Ile Pro Ser Leu Ser Ile Phe Thr Leu Met Ile Phe Asp Glu Cys His		
290	295	300
Asn Thr Ser Lys Gln His Pro Tyr Asn Met Ile Met Phe Asn Tyr Leu		
305	310	315
Asp Gln Lys Leu Gly Gly Ser Ser Gly Pro Leu Pro Gln Val Ile Gly		
325	330	335
Leu Thr Ala Ser Val Gly Val Gly Asp Ala Lys Asn Thr Asp Glu Ala		
340	345	350
Leu Asp Tyr Ile Cys Lys Leu Cys Ala Ser Leu Asp Ala Ser Val Ile		
355	360	365
Ala Thr Val Lys His Asn Leu Glu Glu Leu Glu Gln Val Val Tyr Lys		
370	375	380
Pro Gln Lys Phe Phe Arg Lys Val Glu Ser Arg Ile Ser Asp Lys Phe		
385	390	395
Lys Tyr Ile Ile Ala Gln Leu Met Arg Asp Thr Glu Ser Leu Ala Lys		
405	410	415
Arg Ile Cys Lys Asp Leu Glu Asn Leu Ser Gln Ile Gln Asn Arg Glu		
420	425	430
Phe Gly Thr Gln Lys Tyr Glu Gln Trp Ile Val Thr Val Gln Lys Ala		
435	440	445
Cys Met Val Phe Gln Met Pro Asp Lys Asp Glu Glu Ser Arg Ile Cys		
450	455	460
Lys Ala Leu Phe Leu Tyr Thr Ser His Leu Arg Lys Tyr Asn Asp Ala		
465	470	475
Leu Ile Ile Ser Glu His Ala Arg Met Lys Asp Ala Leu Asp Tyr Leu		

	485	490	495
Lys Asp Phe Phe Ser Asn Val Arg Ala Ala Gly Phe Asp Glu Ile Glu			
	500	505	510
Gln Asp Leu Thr Gln Arg Phe Glu Glu Lys Leu Gln Glu Leu Glu Ser			
	515	520	525
Val Ser Arg Asp Pro Ser Asn Glu Asn Pro Lys Leu Glu Asp Leu Cys			
	530	535	540
Phe Ile Leu Gln Glu Glu Tyr His Leu Asn Pro Glu Thr Ile Thr Ile			
545	550	555	560
Leu Phe Val Lys Thr Arg Ala Leu Val Asp Ala Leu Lys Asn Trp Ile			
	565	570	575
Glu Gly Asn Pro Lys Leu Ser Phe Leu Lys Pro Gly Ile Leu Thr Gly			
	580	585	590
Arg Gly Lys Thr Asn Gln Asn Thr Gly Met Thr Leu Pro Ala Gln Lys			
	595	600	605
Cys Ile Leu Asp Ala Phe Lys Ala Ser Gly Asp His Asn Ile Leu Ile			
	610	615	620
Ala Thr Ser Val Ala Asp Glu Gly Ile Asp Ile Ala Gln Cys Asn Leu			
625	630	635	640
Val Ile Leu Tyr Glu Tyr Val Gly Asn Val Ile Lys Met Ile Gln Thr			
	645	650	655
Arg Gly Arg Gly Arg Ala Arg Gly Ser Lys Cys Phe Leu Leu Thr Ser			
	660	665	670
Asn Ala Gly Val Ile Glu Lys Glu Gln Ile Asn Met Tyr Lys Glu Lys			
	675	680	685
Met Met Asn Asp Ser Ile Leu Arg Leu Gln Thr Trp Asp Glu Ala Val			
	690	695	700
Phe Arg Glu Lys Ile Leu His Ile Gln Thr His Glu Lys Phe Ile Arg			
705	710	715	720
Asp Ser Gln Glu Lys Pro Lys Pro Val Pro Asp Lys Glu Asn Lys Lys			
	725	730	735
Leu Leu Cys Arg Lys Cys Lys Ala Leu Ala Cys Tyr Thr Ala Asp Val			
	740	745	750
Arg Val Ile Glu Glu Cys His Tyr Thr Val Leu Gly Asp Ala Phe Lys			
	755	760	765
Glu Cys Phe Val Ser Arg Pro His Pro Lys Pro Lys Gln Phe Ser Ser			

770 775 780
 Phe Glu Lys Arg Ala Lys Ile Phe Cys Ala Arg Gln Asn Cys Ser His
 785 790 795 800
 Asp Trp Gly Ile His Val Lys Tyr Lys Thr Phe Glu Ile Pro Val Ile
 805 810 815
 Lys Ile Glu Ser Phe Val Val Glu Asp Ile Ala Thr Gly Val Gln Thr
 820 825 830
 Leu Tyr Ser Lys Trp Lys Asp Phe His Phe Glu Lys Ile Pro Phe Asp
 835 840 845
 Pro Ala Glu Met Ser Lys
 850

<210> 3866

<211> 1205

<212> PRT

<213> Homo sapiens

<400> 3866

Met Glu Gln Pro Asn Ser Lys Gly Tyr Ser Leu Gly Arg Thr Pro Gln
 1 5 10 15
 Gly Pro Glu Cys Ser Ser Ala Pro Ala Val Gln Val Gly Thr His Arg
 20 25 30
 Gly Leu Glu Tyr Asn Pro Gly Lys Ile Leu Pro Gly Ser Asp Tyr Gly
 35 40 45
 Leu Gly Asn Pro Pro Ala Leu Asp Pro Lys Leu Pro His Leu Pro Leu
 50 55 60
 Pro Pro Ala Pro Pro Thr Leu Ser Asp Leu Gly Gln Pro Arg Lys Ser
 65 70 75 80
 Pro Leu Thr Gly Thr Asp Lys Lys Tyr Pro Leu Met Lys Gln Arg Gly
 85 90 95
 Phe Tyr Ser Asp Ile Leu Ser Pro Gly Thr Leu Asp Gln Leu Gly Glu
 100 105 110
 Val Cys Arg Gly Pro Arg Met Ser Gln Asn Leu Leu Arg Gln Ala Asp
 115 120 125
 Leu Asp Lys Phe Thr Pro Arg Val Gly Ser Phe Glu Val Pro Glu Asp

130	135	140	
Phe Gln Glu Arg Met	Glu Gln Gln Cys Ile	Gly Ser Thr Thr Arg	Leu
145	150	155	160
Leu Ala Gln Thr Asp	Phe Pro Leu Gln Ala Tyr	Glu Pro Lys Met	Gln
	165	170	175
Val Pro Phe Gln Val	Leu Pro Gly Gln His	Pro Arg Lys Ile	Glu Ile
	180	185	190
Glu Arg Arg Lys Gln	Gln Tyr Leu Ser Leu	Asp Ile Glu Gln	Leu Leu
	195	200	205
Phe Ser Gln Gly Ile	Asp Ser Asn Lys Leu	Met Pro Arg His	Leu Asp
210	215	220	
His Gln His Pro Gln	Thr Ile Glu Gln Gly	His Asp Pro Ile	Phe Pro
225	230	235	240
Ile Tyr Leu Pro Leu	Lys Val Phe Asp Asn	Glu Asp Phe Asp	Cys Arg
	245	250	255
Thr Pro Arg Glu Trp	Ile Asn Met Gly Leu	Glu Pro Gly Ser	Leu Asp
	260	265	270
Arg Lys Pro Val Pro	Gly Lys Ala Leu Leu	Pro Thr Asp Asp	Phe Leu
	275	280	285
Gly His Glu Asp Pro	Lys Ser Gln Lys Leu	Lys Tyr Lys Trp	Cys Glu
290	295	300	
Val Gly Val Leu Asp	Tyr Asp Glu Glu Lys	Lys Leu Tyr Leu	Val His
305	310	315	320
Lys Thr Asp Glu Lys	Gly Leu Val Arg Asp	Glu Met Gly Arg	Pro Ile
	325	330	335
Leu Asn Ala Gly Val	Thr Thr Glu Gly Arg	Pro Pro Leu Gln	Val Cys
	340	345	350
Gln Tyr Trp Val Pro	Arg Ile Gln Leu Leu	Phe Cys Ala Glu	Asp Pro
	355	360	365
Cys Met Phe Ala Gln	Arg Val Val Gln Ala	Asn Ala Leu Arg	Lys Asn
370	375	380	
Thr Glu Ala Leu Leu	Leu Tyr Asn Leu Tyr	Val Asp Cys Met	Pro Ser
385	390	395	400
Asp Gly Gln His Val	Ile Ser Glu Gln Ser	Leu Ser Lys Ile	Lys Gln
	405	410	415
Trp Ala Leu Ser Thr	Pro Arg Met Arg Lys	Gly Pro Ser Val	Leu Glu

	420		425		430										
His	Leu	Ser	Ser	Leu	Ala	Arg	Glu	Val	Ser	Leu	Asp	Tyr	Glu	Arg	Ser
	435						440						445		
Met	Asn	Lys	Ile	Asn	Phe	Asp	His	Val	Val	Ser	Ser	Lys	Pro	Glu	Thr
	450						455						460		
Phe	Ser	Tyr	Val	Thr	Leu	Pro	Lys	Lys	Glu	Glu	Glu	Gln	Val	Pro	Glu
465						470				475					480
Arg	Gly	Leu	Val	Ser	Val	Pro	Lys	Tyr	His	Phe	Trp	Glu	Gln	Lys	Glu
						485				490					495
Asp	Phe	Thr	Phe	Val	Ser	Leu	Leu	Thr	Arg	Pro	Glu	Val	Ile	Thr	Ala
					500				505						510
Leu	Ser	Lys	Val	Arg	Ala	Glu	Cys	Asn	Lys	Val	Thr	Ala	Met	Ser	Leu
		515						520							525
Phe	His	Ser	Ser	Leu	Ser	Lys	Tyr	Ser	His	Leu	Glu	Glu	Phe	Glu	Gln
	530						535								540
Ile	Gln	Ser	Gln	Thr	Phe	Ser	Gln	Val	Gln	Met	Phe	Leu	Lys	Asp	Ser
545						550				555					560
Trp	Ile	Ser	Ser	Leu	Lys	Val	Ala	Met	Arg	Ser	Ser	Leu	Arg	Asp	Met
						565				570					575
Ser	Lys	Gly	Trp	Tyr	Asn	Leu	Tyr	Glu	Thr	Asn	Trp	Glu	Val	Tyr	Leu
						580				585					590
Met	Ser	Lys	Leu	Arg	Lys	Leu	Met	Glu	Leu	Val	Lys	Tyr	Met	Leu	Gln
		595							600						605
Asp	Thr	Leu	Arg	Phe	Leu	Val	Gln	Asp	Ser	Leu	Ala	Ser	Phe	Ser	Gln
	610						615								620
Phe	Ile	Ser	Asp	Thr	Cys	Cys	Ser	Val	Leu	Asn	Cys	Thr	Asp	Asp	Met
625						630					635				640
Val	Trp	Gly	Asp	Asp	Leu	Ile	Asn	Ser	Pro	Tyr	Arg	Pro	Arg	Lys	Asn
						645					650				655
Pro	Leu	Phe	Ile	Met	Asp	Leu	Val	Leu	Asp	Ser	Ser	Gly	Val	His	Tyr
						660									670
Ser	Thr	Pro	Leu	Glu	Gln	Phe	Glu	Ala	Ser	Leu	Leu	Asn	Leu	Phe	Asp
						675									680
Lys	Gly	Ile	Leu	Ala	Thr	His	Ala	Val	Pro	Gln	Leu	Glu	Lys	Leu	Val
						690									700
Met	Glu	Asp	Ile	Phe	Ile	Ser	Gly	Asp	Pro	Leu	Leu	Glu	Ser	Val	Gly

705	710	715	720
Leu His Glu Pro Leu Val Glu Glu Leu Arg Ala Thr Ile Ala Ser Ala			
	725	730	735
Val Ser Lys Ala Met Ile Pro Leu Gln Ala Tyr Ala Lys Glu Tyr Arg			
	740	745	750
Lys Tyr Leu Glu Leu Asn Asn Asn Asp Ile Ala Ser Phe Leu Lys Thr			
	755	760	765
Tyr Gln Thr Gln Gly Leu Leu Ala Gln Glu Val Arg Glu Val Val Leu			
	770	775	780
Thr His Leu Arg Glu Lys Glu Ile Leu Asp Ser Ser Leu Pro Ser Ser			
785	790	795	800
Ile Ile Ile Gly Pro Phe Tyr Ile Asn Thr Asp Asn Val Lys Gln Ser			
	805	810	815
Leu Ser Lys Lys Arg Lys Ala Leu Ala Thr Ser Val Leu Asp Ile Leu			
	820	825	830
Ala Lys Asn Leu His Lys Glu Val Asp Ser Ile Cys Glu Glu Phe Arg			
	835	840	845
Ser Ile Ser Arg Lys Ile Tyr Glu Lys Pro Asn Ser Ile Glu Glu Leu			
	850	855	860
Ala Glu Leu Arg Glu Trp Met Lys Gly Ile Pro Glu Arg Leu Val Gly			
865	870	875	880
Leu Glu Glu Arg Ile Val Lys Val Met Asp Asp Tyr Gln Val Met Asp			
	885	890	895
Glu Phe Leu Tyr Asn Leu Ser Ser Asp Asp Phe Asn Asp Lys Trp Ile			
	900	905	910
Ala Ser Asn Trp Pro Ser Lys Ile Leu Gly Gln Ile Glu Leu Val Gln			
	915	920	925
Gln Gln His Val Glu Asp Glu Glu Lys Phe Arg Lys Ile Gln Ile Met			
	930	935	940
Asp Gln Asn Asn Phe Gln Glu Lys Leu Glu Gly Leu Gln Leu Val Val			
945	950	955	960
Ala Gly Phe Ser Ile His Val Glu Ile Ser Arg Ala His Glu Ile Ala			
	965	970	975
Asn Glu Val Arg Arg Val Lys Lys Gln Leu Lys Asp Cys Gln Gln Leu			
	980	985	990
Ala Met Leu Tyr Asn Asn Arg Glu Arg Ile Phe Ser Leu Pro Ile Thr			

995	1000	1005
Asn Tyr Asp Lys Leu Ser Arg Met Val Lys Glu Phe Gln Pro Tyr Leu		
1010	1015	1020
Asp Leu Trp Thr Thr Ala Ser Asp Trp Leu Arg Trp Ser Glu Ser Trp		
1025	1030	1035 1040
Met Asn Asp Pro Leu Ser Ala Ile Asp Ala Glu Gln Leu Glu Lys Asn		
1045	1050	1055
Val Val Glu Ala Phe Lys Thr Met His Lys Cys Val Lys Gln Phe Lys		
1060	1065	1070
Asp Met Pro Ala Cys Gln Glu Val Ala Leu Asp Ile Arg Ala Arg Ile		
1075	1080	1085
Glu Glu Phe Lys Pro Tyr Ile Pro Leu Ile Gln Gly Leu Arg Asn Pro		
1090	1095	1100
Gly Met Arg Ile Arg His Trp Glu Thr Leu Ser Asn Gln Ile Asn Ile		
1105	1110	1115 1120
Asn Val Arg Pro Lys Ala Asn Leu Thr Phe Ala Arg Cys Leu Glu Met		
1125	1130	1135
Asn Leu Gln Asp His Ile Glu Ser Ile Ser Lys Val Ala Glu Val Ala		
1140	1145	1150
Gly Lys Glu Tyr Ala Ile Glu Gln Val Gly Ser His Gln Arg Ala Gln		
1155	1160	1165
Pro Leu Gln Pro Gly Pro Ala Gly Gln Pro Asp Leu Leu Leu Trp Gln		
1170	1175	1180
Pro Gln Pro Leu Gly Arg Met Thr Val Ile Ser Pro Ile Pro Gly Val		
1185	1190	1195 1200
Met Arg Pro Arg Gly		
1205		

<210> 3867

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3867

Met Ala Gln Glu Lys Met Glu Leu Asp Leu Glu Pro Asp Thr Ser Tyr

1	5	10	15
Gly Gly Thr Leu Arg Arg Ser Ser Ser Ala Pro Leu Ile His Gly Leu			
20	25	30	
Ser Asp Leu Ser Gln Val Phe Gln Pro Tyr Thr Leu Arg Thr Arg Arg			
35	40	45	
Asn Ser Thr Thr Ile Met Ser Arg His Ser Leu Leu Leu Ser Ser Ser			
50	55	60	
Pro Asn Arg Ile Pro Ser Ser Arg Leu His Gln Ile Lys Arg Glu Glu			
65	70	75	80
Gly Leu Asp Met Val Asn Arg Glu Thr Ala His Glu Arg Glu Met Gln			
85	90	95	
Thr Ala Met Gln Ile Ser Gln Ser Trp Asp Glu Ser Leu Ser Leu Ser			
100	105	110	
Asp Ser Asp Phe Asp Lys Pro Glu Lys Leu Tyr Ser Pro Lys Arg Ile			
115	120	125	
Asp Phe Thr Pro Val Ser Pro Ala Pro Ser Pro Thr Arg Gly Phe Gly			
130	135	140	
Lys Met Phe Val Ser Ser Ser Gly Leu Pro Pro Ser Pro Val Pro Ser			
145	150	155	160
Pro Arg Arg Phe Ser Arg Arg Ser Gln Ser Pro Val Lys Cys Ile Arg			
165	170	175	
Pro Ser Val Leu Gly Pro Leu Lys Arg Lys Gly Glu Met Glu Thr Glu			
180	185	190	
Ser Gln Pro Lys Arg Leu Phe Gln Gly Thr Thr Asn Met Leu Ser Pro			
195	200	205	
Asp Ala Ala Gln Leu Ser Asp Leu Ser Ser Cys Ser Asp Ile Leu Asp			
210	215	220	
Gly Ser Ser Ser Ser Ser Gly Leu Ser Ser Asp Pro Leu Ala Lys Gly			
225	230	235	240
Ser Ala Thr Ala Glu Ser Pro Val Ala Cys Ser Asn Ser Cys Ser Ser			
245	250	255	
Phe Ile Leu Met Asp Asp Leu Ser Pro Lys			
260	265		

<210> 3868

<211> 910

<212> PRT

<213> Homo sapiens

<400> 3868

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Met Thr Lys His Pro Leu Ala Met Tyr Pro Asn Leu Gly Glu Asp Met
  1              5              10              15
Pro Pro Asp Leu Leu Leu Gln Val Leu Lys Pro Leu Asp Pro Glu Arg
      20              25              30
Lys Leu Glu Asp Ala Gly Ser Cys Glu Gly Gln Glu Lys Thr Thr Asp
      35              40              45
Glu Pro Thr Glu Pro Gly Lys Tyr Pro Cys Gly Glu Phe Ser Pro Arg
      50              55              60
Pro Pro Glu Thr Arg Val Ser Cys Leu Pro Pro Glu Pro Pro Lys Thr
      65              70              75              80
Pro Val Ser Ser Leu Arg Pro Glu Pro Pro Glu Thr Gly Val Ser His
      85              90              95
Leu Arg Pro Gln Pro Pro Lys Thr Gln Val Ser Ser Leu His Leu Glu
      100             105             110
Pro Pro Glu Thr Gly Val Ser His Leu Arg Pro Glu Pro Pro Lys Thr
      115             120             125
Gln Val Ser Ser Leu His Leu Glu Pro Pro Glu Thr Gly Val Ser His
      130             135             140
Leu Tyr Leu Glu Pro Ser Gly Thr Gly Val Ser His Leu Cys Pro Glu
      145             150             155             160
Pro Pro Lys Thr Arg Val Ser His Leu His Arg Glu Pro Pro Glu Thr
      165             170             175
Gly Val Pro Asp Leu Cys Leu Glu Pro Pro Lys Ser Arg Val Ser His
      180             185             190
Leu Arg Pro Glu Pro Ser Glu Thr Gly Val Ser His Leu His Pro Glu
      195             200             205
Pro Pro Lys Thr Leu Val Ser Ser Leu His Pro Glu Pro Pro Glu Thr
      210             215             220
Gly Val Ser His Leu Cys Pro Glu Pro Pro Glu Thr Arg Val Ser Pro
      225             230             235             240

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Leu Cys Pro Glu Pro Pro Lys Thr Arg Val Ser Ser Leu Pro Pro Glu
 530 535 540
 Pro Pro Glu Thr Gly Val Ser His Leu Cys Pro Glu Pro Pro Glu Thr
 545 550 555 560
 Arg Val Ser His Leu Arg Pro Glu Pro Pro Glu Thr Gly Val Ser Arg
 565 570 575
 Leu His Pro Glu Pro Pro Lys Thr Arg Val Ser Ser Leu His Ala Glu
 580 585 590
 Pro Pro Glu Ser Arg Val Ser His Leu Cys Pro Glu Pro Pro Glu Thr
 595 600 605
 Gly Val Ser His Leu Arg Pro Glu Pro Pro Lys Pro Arg Val Ser Ser
 610 615 620
 Leu Arg Pro Glu Pro Leu Glu Thr Arg Val Ser His Leu Arg Pro Glu
 625 630 635 640
 Pro Pro Glu Thr Gly Val Ser His Leu His Pro Glu Leu Pro Lys Pro
 645 650 655
 Arg Val Ser Ser Leu His Leu Glu Pro Pro Lys Thr Arg Arg Val Ser
 660 665 670
 Ser Leu Arg Leu Glu Pro Pro Lys Thr Gly Arg Val Ser Ser Leu Cys
 675 680 685
 Pro Glu Pro Thr Lys Thr Gly Ala Ser His Leu Lys Glu Leu Phe Gln
 690 695 700
 Glu Gly Thr Ser Ser Thr Met Glu Cys Val Ser Asp Ser Leu Gln Arg
 705 710 715 720
 Arg His Thr Ser Arg Lys Leu Arg Asp Phe Lys Trp Ala Gly Asp Leu
 725 730 735
 Gly Val Asn Glu Glu Ser Ile Ser Ser Leu Phe Asp Phe Thr Pro Glu
 740 745 750
 Cys Arg Ala Thr Tyr Gln Asp Gln Lys Asn Lys Lys Ala Asn Glu Cys
 755 760 765
 Ser Ser Gly Leu Lys Tyr Ser Met Glu Leu Asp Glu Met Asp Glu Val
 770 775 780
 Lys Phe Phe Ser Gln Glu Lys Asp Leu Asp Gly Lys Ile Gln Asn Ala
 785 790 795 800
 Pro Asn Ser His Ser Ala Gln His Val Lys Met Gly Tyr Gly Ala Trp
 805 810 815

Tyr Leu Lys Pro Lys Leu Gly Lys Lys Leu Arg Ser Asp Glu Pro Leu
 820 825 830
 Ile Asp Pro Lys Leu Val Leu Glu Lys Pro Asp Glu Pro Asp Ile Leu
 835 840 845
 Asp Gly Leu Tyr Gly Pro Ile Ala Phe Lys Asp Phe Ile Leu Ser Lys
 850 855 860
 Gly Tyr Glu Met Pro Gly Ile Ile Gln Arg Leu Phe Ala Arg Arg Gly
 865 870 875 880
 Trp Thr Tyr Asp Ser Val Lys Thr Pro Ile Gln Arg Ala Met Gln Val
 885 890 895
 Tyr Lys Tyr Lys Glu Asp Val Thr Asp Ala Ser Glu Glu Asp
 900 905 910

<210> 3869

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3869

Met Arg Glu Trp Glu Asn Arg Asn Arg Gly Leu Arg Glu Leu Glu Glu
 1 5 10 15
 Val Ala Gly Ser Ser Arg Thr Arg Glu Gln Leu Val Pro Arg Leu Gly
 20 25 30
 Gly Arg Ala Gly Tyr Asp Trp Trp Ala Ser Gly Glu Val Gln Ser Gly
 35 40 45
 Arg Glu Glu Ala Gly Glu Ala His Pro Ser Val Ala Glu Ser Ser Leu
 50 55 60
 Arg Thr Arg Gly Trp Gly Gly Asp Ser His Ala Met Thr Ala Ser Pro
 65 70 75 80
 Val Pro Ala Leu Gln Leu Val Ser Ser Lys Arg Asp Leu Val Leu Val
 85 90 95
 Lys Glu Ala Leu Ser Trp Tyr Asp Ala Gln Gln His Cys Arg Leu His
 100 105 110
 Tyr Thr Asp Leu Ala Asp Leu Gln Pro Ser Gly Leu Trp Lys Leu Tyr

115	120	125
Ser Leu Met Thr Ser Thr Pro Ala Trp Ile Gly Leu Phe Phe Asp Ala		
130	135	140
Ser Thr Ser Gly Leu Arg Trp Ser Ser Gly Ser Thr Phe Thr Ala Leu		
145	150	155
Glu Trp Gly Gln Lys Leu Pro Glu Phe Gly Val Gly Phe Cys Ala Thr		
165	170	175
Leu Tyr Thr Trp Leu Lys Leu Pro Ser Ile Gly Ala Ala Ser Cys Thr		
180	185	190
Ala Gln Lys Pro Phe Leu Cys Tyr Cys Gly Val Phe Thr Phe Ile Phe		
195	200	205
Gln Ala Trp Ser Phe Pro Gln Gly Pro His Ser Val Ala Gln Ala Gly		
210	215	220
Val Gln Trp Cys Asp His Ser Ser Leu		
225	230	

<210> 3870

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3870

Met Glu Lys Ala Ser Gly Ala Leu Arg Cys Gln Gln Lys Arg Cys Ile		
1	5	10
Ser Glu Leu Thr Val Met Thr Gln Ile Gly Arg Glu Gly Asn Met Trp		
20	25	30
Val Arg Val Ala Ala Met Gly Val Asn Met Ile Lys Tyr Gly Gly Gly		
35	40	45
Val Gln Ile Ser Trp Thr Trp Leu Gln Ser Val Phe Ile Phe Ser Leu		
50	55	60
Ser Glu Arg Val Phe Gly Phe Ser Ile Leu Leu Ile Leu Gln Ala Ile		
65	70	75
His Tyr Val Pro Trp Glu Val Glu Trp Pro Ser Ser Leu Leu Cys Val		
85	90	95

Gly Tyr Thr Ala Cys Leu Thr Ser Leu Trp Val Leu His His Leu His
 100 105 110
 Ala His Met Ile Pro Leu Phe Glu Leu Met Ala Gly Asn Arg Thr
 115 120 125

<210> 3871

<211> 842

<212> PRT

<213> Homo sapiens

<400> 3871

Met Gly Ala Arg Ala Ala Gly Thr Ser Ser Gly Gly Gly Pro Arg Pro
 1 5 10 15
 Cys Leu Ala Arg Gly Leu Ser Ala Ser Pro Phe Pro Ala Lys Gln Gln
 20 25 30
 His Pro Gln Ala Gly Ala Ser Pro Ala Glu Leu Gln Gln Arg Ala Tyr
 35 40 45
 Tyr Arg Ala Arg Gln Asp Ala Ala Ser Gln Pro Gly Leu Gly Phe Leu
 50 55 60
 Ile Ser Pro Ser Ser Cys Ser Ser Trp Gly Pro Gly Ser Phe Thr Arg
 65 70 75 80
 Ser Cys Gly Tyr Pro Thr Leu Cys Ser Ser Trp Ile Ser Lys Arg Glu
 85 90 95
 Pro Gly Glu Leu Ser Gly Val Trp Thr Ser Ala Trp Arg Thr His Ala
 100 105 110
 Ala Phe Thr Gly Ser Gln Asp Leu Cys Leu Tyr Lys Gly Leu Leu Gly
 115 120 125
 Ser Ile Tyr Glu Asp Lys Thr Ala Leu Ser Leu Leu Gly Leu Gly Glu
 130 135 140
 Glu Thr Asn Glu Glu Asp Glu Glu Glu Ser Asp Asn Gln Ser Val His
 145 150 155 160
 Ser Ser Ser Glu Pro Leu Arg Asn Leu His Leu Asp Ile Gly Ala Leu
 165 170 175
 Gly Gly Asp Phe Glu Tyr Glu Glu Ser Leu Arg Thr Ser Gln Pro Glu

180	185	190
Glu Lys Lys Asp Val Ser Leu Asp Ser Asp Ala Ala Gly Pro Pro Thr		
195	200	205
Pro Cys Lys Pro Ser Ser Pro Gly Ala Asp Ser Ser Leu Ser Ser Ala		
210	215	220
Val Gly Lys Gly Arg Gln Gly Ser Gly Ala Arg Pro Gly Leu Pro Glu		
225	230	235
Lys Glu Glu Asn Glu Lys Ser Glu Pro Lys Ile Cys Arg Asn Leu Val		
245	250	255
Thr Pro Lys Ala Asp Pro Thr Gly Ser Glu Pro Ala Lys Ala Ser Glu		
260	265	270
Lys Glu Ala Pro Glu Asp Thr Val Asp Ala Gly Glu Glu Gly Ser Arg		
275	280	285
Arg Glu Glu Ala Ala Lys Glu Pro Lys Lys Lys Ala Ser Ala Leu Glu		
290	295	300
Glu Gly Ser Ser Asp Ala Ser Gln Glu Leu Glu Ile Ser Glu His Met		
305	310	315
Lys Glu Pro Gln Leu Ser Asp Ser Ile Ala Ser Asp Pro Lys Ser Phe		
325	330	335
His Gly Leu Asp Phe Gly Phe Arg Ser Arg Ile Ser Glu His Leu Leu		
340	345	350
Asp Val Asp Val Leu Ser Pro Val Leu Gly Gly Ala Cys Arg Gln Ala		
355	360	365
Gln Gln Pro Leu Gly Ile Glu Asp Lys Asp Asp Ser Gln Ser Ser Gln		
370	375	380
Asp Glu Leu Gln Ser Lys Gln Ser Lys Gly Leu Glu Glu Arg Tyr His		
385	390	395
Arg Leu Ser Pro Pro Leu Pro His Glu Glu Arg Ala Gln Ser Pro Pro		
405	410	415
Arg Ser Leu Ala Thr Glu Glu Glu Pro Pro Gln Gly Pro Glu Gly Gln		
420	425	430
Pro Glu Trp Lys Glu Ala Glu Glu Leu Gly Glu Asp Ser Ala Ala Ser		
435	440	445
Leu Ser Leu Gln Leu Ser Leu Gln Arg Arg Ser Thr Glu Pro Val Ala		
450	455	460
Pro Pro Glu Gln Leu Ser Glu Ala Ala Leu Lys Ala Met Glu Glu Ala		

465	470	475	480
Val Ala Gln Val	Leu Glu Gln Asp Gln Arg His	Leu Leu Glu Ser	Lys
485	490	495	
Gln Glu Lys Met	Gln Gln Leu Arg Glu Lys Leu Cys	Gln Glu Glu Glu	
500	505	510	
Glu Glu Ile Leu Arg Leu His	Gln Gln Lys Glu Gln Ser	Leu Ser Ser	
515	520	525	
Leu Arg Glu Arg Leu Gln Lys	Ala Ile Glu Glu Glu Glu	Ala Arg Met	
530	535	540	
Arg Glu Glu Glu Ser	Gln Arg Leu Ser Trp Leu Arg	Ala Gln Val Gln	
545	550	555	560
Ser Ser Thr Gln Ala Asp	Glu Asp Gln Ile Arg Ala	Glu Gln Glu Ala	
565	570	575	
Ser Leu Gln Lys Leu Arg	Glu Glu Leu Glu Ser	Gln Gln Lys Ala Glu	
580	585	590	
Arg Ala Ser Leu Glu Gln Lys	Asn Arg Gln Met Leu Glu	Gln Leu Lys	
595	600	605	
Glu Glu Ile Glu Ala Ser	Glu Lys Ser Glu Gln Ala	Ala Leu Asn Ala	
610	615	620	
Ala Lys Glu Lys Ala Leu	Gln Gln Leu Arg Glu Gln	Leu Glu Gly Glu	
625	630	635	640
Arg Lys Glu Ala Val Ala	Thr Leu Glu Lys Glu His	Ser Ala Glu Leu	
645	650	655	
Glu Arg Leu Cys Ser Ser	Leu Glu Ala Lys His	Arg Glu Val Val Ser	
660	665	670	
Ser Leu Gln Lys Lys Ile	Gln Glu Ala Gln Gln	Lys Glu Glu Ala Gln	
675	680	685	
Leu Gln Lys Cys Leu Gly	Gln Val Glu His Arg	Val His Gln Lys Ser	
690	695	700	
Tyr His Val Ala Gly Tyr	Glu His Glu Leu Ser	Ser Leu Leu Arg Glu	
705	710	715	720
Lys Arg Gln Glu Val Glu	Gly Glu His Glu Arg	Arg Leu Asp Lys Met	
725	730	735	
Lys Glu Glu His Gln Gln	Val Met Ala Lys Ala	Arg Glu Gln Tyr Glu	
740	745	750	
Ala Glu Glu Arg Lys	Gln Arg Ala Glu Leu	Leu Gly His Leu Thr Gly	

755	760	765
Glu Leu Glu Arg Leu Gln Arg Ala His Glu Arg Glu Leu Glu Thr Val		
770	775	780
Arg Gln Glu Gln His Lys Arg Leu Glu Asp Leu Arg Arg Arg His Arg		
785	790	795
Glu Gln Glu Arg Lys Leu Gln Asp Leu Glu Leu Asp Leu Glu Thr Arg		
805	810	815
Ala Lys Asp Val Lys Ala Arg Leu Ala Leu Leu Glu Val Gln Val Arg		
820	825	830
Asp Leu Gln Glu Ser Leu Thr Ser Glu Ser		
835	840	

<210> 3872

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3872

Met Leu Trp Arg Lys Gly Met Arg Ser Gln Gly Ser Glu Val Arg Pro		
1	5	10
Ala Ile Pro Gln Val Cys Gly Trp Ala Arg Arg Gln Ala Pro Lys Asn		
20	25	30
Leu Thr Cys Asp Pro Gly Cys Pro His Arg Leu Lys Gly Leu Arg Asp		
35	40	45
Leu Glu Thr Gly Asn Met Val Cys Gly Gly Pro Val Asp Pro Gly Val		
50	55	60
Gly Val Arg Asp Gly Asp Arg His Arg Asp Ile Leu Arg Ala Arg Asp		
65	70	75
Arg Lys Thr Lys Asn Asp Arg Asn Arg Asp Thr Glu Arg Tyr Arg Glu		
85	90	95
Gly Gln Arg Pro Arg Lys Pro Glu		
100		

<210> 3873

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3873

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Met Leu Ala Arg Pro Gly Val Glu Ala Trp Arg Arg Arg Arg Asp Ala
  1             5             10             15
Arg Leu Arg Ala Gly Val Gly Gly Ala Cys Val Ala Gly Ala Lys Ser
          20             25             30
His Gly Ala Gly Leu Gly Ala Gly Arg Arg Ala Arg Ala Glu Thr His
      35             40             45
Val Thr Ala Ala Arg Arg Arg Asp Gly Trp Asn Phe Ser Asn Pro Lys
      50             55             60
Ser Arg Asp Arg Pro Pro Leu Ala Cys Ser Arg Ala Leu Gln Asp Pro
      65             70             75             80
Leu Ala His Gly Ala Val Pro Gly Arg Pro Leu Leu Ala Thr Arg Ala
          85             90             95
Thr Ala Gly Leu Ser Cys Leu Glu Trp Trp Pro Pro Pro Pro Ala Gly
      100             105             110
Ala Gly Ala Leu Gln Gly Pro Leu Ala Tyr Cys Ile Val Val Ala Arg
      115             120             125
Arg Leu Leu Ala Ala Thr Asp Ile Ala Gly Ser Ser Cys Ser Arg Cys
      130             135             140
Thr Gly Ser Thr Pro Ala Cys Trp Gln Leu Gly Thr Leu Leu Gly Pro
      145             150             155             160
Leu Ala Pro Thr Val Val Ala Asp Tyr Arg Glu Thr Pro Gly Ala Tyr
          165             170             175
Ala Val Trp Ser Gln
          180

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<210> 3874

<211> 1014

<212> PRT

<213> Homo sapiens

<400> 3874

Met Pro Thr Arg Ser Arg Arg Lys Ala Arg Val Gly Lys Tyr Gly Asp
 1 5 10 15
 Ser Met Thr Glu Ala Asp Lys Thr Lys Pro Leu Ser Lys Val Ser Ser
 20 25 30
 Ile Ala Val Gln Thr Val Ala Glu Ile Ser Val Gln Thr Glu Pro Val
 35 40 45
 Gly Thr Ile Arg Thr Pro Ser Ile Arg Ala Arg Val Asp Ala Lys Val
 50 55 60
 Glu Ile Ile Lys His Ile Ser Ala Pro Glu Lys Thr Tyr Lys Gly Gly
 65 70 75 80
 Ser Leu Gly Cys Gln Thr Glu Ala Asp Ser Asp Thr Gln Ser Pro Gln
 85 90 95
 Tyr Leu Ser Ala Thr Ser Pro Pro Lys Asp Lys Lys Arg Pro Thr Pro
 100 105 110
 Leu Glu Ile Gly Tyr Ser Ser His Leu Arg Ala Asp Ser Thr Val Gln
 115 120 125
 Leu Ala Pro Ser Pro Pro Lys Ser Pro Lys Val Leu Tyr Ser Pro Ile
 130 135 140
 Ser Pro Leu Ser Pro Gly Lys Ala Leu Glu Ser Ala Phe Val Pro Tyr
 145 150 155 160
 Glu Lys Pro Leu Pro Asp Asp Ile Ser Pro Gln Lys Val Leu His Pro
 165 170 175
 Asp Met Ala Lys Val Pro Pro Ala Ser Pro Lys Thr Ala Lys Met Met
 180 185 190
 Gln Arg Ser Met Ser Asp Pro Lys Pro Leu Ser Pro Thr Ala Asp Glu
 195 200 205
 Ser Ser Arg Ala Pro Phe Gln Tyr Thr Glu Gly Tyr Thr Thr Lys Gly
 210 215 220
 Ser Gln Thr Met Thr Ser Ser Gly Ala Gln Lys Lys Val Lys Arg Thr
 225 230 235 240
 Leu Pro Asn Pro Pro Pro Glu Glu Ile Ser Thr Gly Thr Gln Ser Thr
 245 250 255
 Phe Ser Thr Met Gly Thr Val Ser Arg Arg Arg Ile Cys Arg Thr Asn
 260 265 270

Thr Met Ala Arg Ala Lys Ile Leu Gln Asp Ile Asp Arg Glu Leu Asp
 275 280 285
 Leu Val Glu Arg Glu Ser Ala Lys Leu Arg Lys Lys Gln Ala Glu Leu
 290 295 300
 Asp Glu Glu Glu Lys Glu Ile Asp Ala Lys Leu Arg Tyr Leu Glu Met
 305 310 315 320
 Gly Ile Asn Arg Arg Lys Glu Ala Leu Leu Lys Glu Arg Glu Lys Arg
 325 330 335
 Glu Arg Ala Tyr Leu Gln Gly Val Ala Glu Asp Arg Asp Tyr Met Ser
 340 345 350
 Asp Ser Glu Val Ser Ser Thr Arg Pro Thr Arg Ile Glu Ser Gln His
 355 360 365
 Gly Ile Glu Arg Pro Arg Thr Ala Pro Gln Thr Glu Phe Ser Gln Phe
 370 375 380
 Ile Pro Pro Gln Thr Gln Thr Glu Ser Gln Leu Val Pro Pro Thr Ser
 385 390 395 400
 Pro Tyr Thr Gln Tyr Gln Tyr Ser Ser Pro Ala Leu Pro Thr Gln Ala
 405 410 415
 Pro Thr Ser Tyr Thr Gln Gln Ser His Phe Glu Gln Gln Thr Leu Tyr
 420 425 430
 His Gln Gln Val Ser Pro Tyr Gln Thr Gln Pro Thr Phe Gln Ala Val
 435 440 445
 Ala Thr Met Ser Phe Thr Pro Gln Val Gln Pro Thr Pro Thr Pro Gln
 450 455 460
 Pro Ser Tyr Gln Leu Pro Ser Gln Met Met Val Ile Gln Gln Lys Pro
 465 470 475 480
 Arg Gln Thr Thr Leu Tyr Leu Glu Pro Lys Ile Thr Ser Asn Tyr Glu
 485 490 495
 Val Ile Arg Asn Gln Pro Leu Met Ile Ala Pro Val Ser Thr Asp Asn
 500 505 510
 Thr Phe Ala Val Ser His Leu Gly Ser Lys Tyr Asn Ser Leu Asp Leu
 515 520 525
 Arg Ile Gly Leu Glu Glu Arg Ser Ser Met Ala Ser Ser Pro Ile Ser
 530 535 540
 Ser Ile Ser Ala Asp Ser Phe Tyr Ala Asp Ile Asp His His Thr Pro
 545 550 555 560

Arg Asn Tyr Val Leu Ile Asp Asp Ile Gly Glu Ile Thr Lys Gly Thr
 565 570 575
 Ala Ala Leu Ser Thr Ala Phe Ser Leu His Glu Lys Asp Leu Ser Lys
 580 585 590
 Thr Asp Arg Leu Leu Arg Thr Thr Glu Thr Arg Arg Ser Gln Glu Val
 595 600 605
 Thr Asp Phe Leu Ala Pro Leu Gln Ser Ser Ser Arg Leu His Ser Tyr
 610 615 620
 Val Lys Ala Glu Glu Asp Pro Met Glu Asp Pro Tyr Glu Leu Lys Leu
 625 630 635 640
 Leu Lys His Gln Ile Lys Gln Glu Phe Arg Arg Gly Thr Glu Ser Leu
 645 650 655
 Asp His Leu Ala Gly Leu Ser His Tyr Tyr His Ala Asp Thr Ser Tyr
 660 665 670
 Arg His Phe Pro Lys Ser Glu Lys Tyr Ser Ile Ser Arg Leu Thr Leu
 675 680 685
 Glu Lys Gln Ala Ala Lys Gln Leu Pro Ala Ala Ile Leu Tyr Gln Lys
 690 695 700
 Gln Ser Lys His Lys Lys Ser Leu Ile Asp Pro Lys Met Ser Lys Phe
 705 710 715 720
 Ser Pro Ile Gln Glu Ser Arg Asp Leu Glu Pro Asp Tyr Ser Ser Tyr
 725 730 735
 Met Thr Ser Ser Thr Ser Ser Ile Gly Gly Ile Ser Ser Arg Ala Arg
 740 745 750
 Leu Leu Gln Asp Asp Ile Thr Phe Gly Leu Arg Lys Asn Ile Thr Asp
 755 760 765
 Gln Gln Lys Phe Met Gly Ser Ser Leu Gly Thr Gly Leu Gly Thr Leu
 770 775 780
 Gly Asn Thr Ile Arg Ser Ala Leu Gln Asp Glu Ala Asp Lys Pro Tyr
 785 790 795 800
 Ser Ser Gly Ser Arg Ser Arg Pro Ser Ser Arg Pro Ser Ser Val Tyr
 805 810 815
 Gly Leu Asp Leu Ser Ile Lys Arg Asp Ser Ser Ser Ser Ser Leu Arg
 820 825 830
 Leu Lys Ala Gln Glu Ala Glu Ala Leu Asp Val Ser Phe Ser His Ala

835	840	845	
Ser Ser Ser Ala Arg Thr Lys Pro Thr Ser Leu Pro Ile Ser Gln Ser			
850	855	860	
Arg Gly Arg Ile Pro Ile Val Ala Gln Asn Ser Glu Glu Glu Ser Pro			
865	870	875	880
Leu Ser Pro Val Gly Gln Pro Met Gly Met Ala Arg Ala Ala Ala Gly			
885	890	895	
Pro Leu Pro Pro Ile Ser Ala Asp Thr Arg Asp Gln Phe Gly Ser Ser			
900	905	910	
His Ser Leu Pro Glu Val Gln Gln His Met Arg Glu Glu Ser Arg Thr			
915	920	925	
Arg Gly Tyr Asp Arg Asp Ile Ala Phe Ile Met Asp Asp Phe Gln His			
930	935	940	
Ala Met Ser Asp Ser Glu Gly Lys Leu Gly Leu Lys Leu Pro Cys Tyr			
945	950	955	960
Ser Gln Asn Ser Asn Ser Tyr Phe Ser Ala Cys Leu Ile Ser Leu Leu			
965	970	975	
Gln Arg Cys Ile Leu Leu Phe Leu Val Cys Leu Leu His Val Tyr Phe			
980	985	990	
Asn Phe Ile Ser Cys Lys Trp Lys Phe Tyr His Val Tyr Arg Phe Cys			
995	1000	1005	
Ser Met Leu Phe Phe Ile			
1010			

<210> 3875

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3875

Met Thr Val Val Val Pro Leu Ile Ile Gly Gln Ile Val Arg Arg Tyr
1 5 10 15
Ile Lys Asp Trp Leu Glu Arg Lys Lys Pro Pro Phe Gly Ala Ile Ser
20 25 30
Ser Ser Val Leu Leu Met Ile Ile Tyr Thr Thr Phe Cys Asp Thr Phe

35 40 45
 Ser Asn Pro Asn Ile Asp Leu Asp Lys Phe Ser Leu Val Leu Ile Leu
 50 55 60
 Phe Ile Ile Phe Ser Ile Gln Leu Ser Phe Met Leu Leu Thr Phe Ile
 65 70 75 80
 Phe Ser Thr Arg Asn Asn Ser Gly Phe Thr Pro Ala Asp Thr Val Ala
 85 90 95
 Ile Ile Phe Cys Ser Thr His Lys Ser Leu Thr Leu Gly Ile Pro Met
 100 105 110
 Leu Lys Ile Val Phe Ala Gly His Glu His Leu Ser Leu Ile Ser Val
 115 120 125
 Pro Leu Leu Ile Tyr His Pro Ala Gln Ile Leu Leu Gly Ser Val Leu
 130 135 140
 Val Pro Thr Ile Lys Ser Trp Met Val Ser Arg Gln Lys Gly Val Lys
 145 150 155 160
 Leu Thr Arg Pro Thr Val
 165

<210> 3876

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3876

Met Ser Trp Thr Phe Arg Gly Gly Ser Ser Trp Thr Cys Leu Gly Val
 1 5 10 15
 Gly Lys Ser Val Leu Leu Ala Pro Tyr Gly Ala Ser Cys Leu Pro Leu
 20 25 30
 Trp Leu Leu His Ser Cys Thr His Pro Thr Arg Pro Gly Leu Thr His
 35 40 45
 Gly Glu Ser Trp Leu Thr Ala Ile Cys Leu Phe Gly Ser Ser Val Pro
 50 55 60
 Leu Gln Thr Trp Val Phe Ser Val Gly Val Ser Lys Gly Phe Lys Leu
 65 70 75 80
 Asn Pro Gly Gly Leu Phe Ser Pro Asp Asp Glu Cys Cys Trp Ala Cys

	85		90		95
Thr Ile Tyr Asp Phe Val Gly His Thr Gly Thr Trp Asn Pro Val Val					
	100		105		110
Ala Trp Tyr Pro Val Val Lys His Ser Ile Glu Ser Gly Gln Gly Thr					
	115		120		125
Leu Lys Val Ala Ser Asn Arg Gly His Val Ser Leu Leu Trp Met Thr					
	130		135		140

<210> 3877

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3877

Met Ala Val Ser Ser Gly Pro Pro Arg Pro Ser Gln Trp Glu Pro Arg				
1	5	10	15	
Leu Pro Ala Arg Ala Asp Ser Ala His Gly Ala Cys Pro Gln Pro Val				
	20	25	30	
Gly Ser Pro Ala Pro Ala Gly Val Gly Lys His Arg Leu Pro Val Leu				
	35	40	45	
Thr Gln Pro Ser Ala Ser Ser Ser Cys Pro Leu Trp Ser Gly Ala Ser				
	50	55	60	
Thr Ser Lys Ala Trp Ser Val Glu Thr Ser Pro Asp Val Ser Ser Gln				
	65	70	75	80
Glu Phe Arg Ala Ala Ala Ser Asn Ala Leu Leu Gly Ser Arg Ala Phe				
	85	90	95	
Leu Gly Ala Arg Arg Arg Pro Asn Lys Ile Thr Lys His Phe Leu Glu				
	100	105	110	
Phe Gln Lys Lys Thr Gly Glu Lys Tyr Leu Gln Val Gly Met Ile Leu				
	115	120	125	
Ile Leu Val Asp Gly Pro Ile Arg Thr Leu Val Gly Lys Lys Arg Gln				
	130	135	140	
His Lys Thr Val Arg				
145				

<210> 3878

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3878

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Met Cys Gly Pro Ser Gly Asp Gly Asp Pro Arg Cys Gly Leu Arg Asn
 1             5             10             15
Gln Cys Val Ser Trp Thr Leu Leu Thr Ser Lys Leu Glu Gln Lys Arg
      20             25             30
His Leu Cys Gly Ala Leu Thr His Pro Arg Tyr Phe Ala Thr Ser Phe
      35             40             45
Asn Ile Pro Ser Leu Arg Thr Gln Thr Tyr Met Gly Asp Arg Gly Val
      50             55             60
Tyr Asn Pro Ile Ser Tyr Leu Tyr Thr Lys Pro Trp Ala Thr Glu Ser
      65             70             75             80
Val Lys Phe Met Val Ile Lys Pro Leu His Arg Gly Gly Pro Val Ser
      85             90             95
Pro Trp Lys His His Thr Leu Leu Pro Ala Gln Glu Val Met Glu Gly
      100            105            110
Asp Gly

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<210> 3879

<211> 937

<212> PRT

<213> Homo sapiens

<400> 3879

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Met Gly Val Lys Lys Lys Lys Glu Met Gln Val Ala Ala Leu Thr Ile
 1             5             10             15
Cys His Gln Asp Leu Glu Thr Leu Lys Ser Phe Ala Asp Val Glu Gly
      20             25             30
Lys Asn Leu Ala Ser Leu Leu Leu His Cys Val Gln Leu Thr Asp Gly

```

35	40	45
Val Ser Gln Ile His Tyr Ile Lys Gln Ile Val Pro Leu Leu Glu Lys		
50	55	60
Ala Asp Lys Asn Gly Met Cys Asp Pro Thr Ile Gln Ser Cys Leu Asp		
65	70	75
Ile Leu Ala Gly Ile Tyr Leu Ser Leu Ser Leu Lys Asn Pro Leu Lys		
85	90	95
Lys Val Leu Ala Ser Ser Leu Asn Ser Leu Pro Asp Phe Phe Leu Pro		
100	105	110
Glu Ala Met His Arg Phe Thr Ser Arg Leu Gln Glu Glu Leu Asn Thr		
115	120	125
Thr Asp Leu Tyr Ser Tyr Arg Lys Val Thr Asp Asn Ile Ser Ser Cys		
130	135	140
Met Glu Asn Phe Asn Leu Gly Arg Ala Ser Val Asn Asn Leu Leu Lys		
145	150	155
Asn Val Leu His Phe Leu Gln Lys Ser Leu Ile Glu Ile Leu Glu Glu		
165	170	175
Asn Arg Lys Cys Ala Gly Asn His Ile Ile Gln Thr Gln Leu Met Asn		
180	185	190
Asp Leu Leu Val Gly Ile Arg Val Ser Met Met Leu Val Gln Lys Val		
195	200	205
Gln Asp Phe Gln Gly Asn Leu Trp Lys Thr Ser Asp Ser Pro Ile Trp		
210	215	220
Gln Asn Met Cys Gly Leu Leu Ser Ile Phe Thr Lys Val Leu Ser Asp		
225	230	235
Asp Asp Leu Leu Arg Thr Val Gln Ser Thr Ser Gly Leu Ala Ile Ile		
245	250	255
Leu Phe Ile Lys Thr Met Phe His Pro Ser Glu Lys Ile Pro His Leu		
260	265	270
Ile Ser Ser Val Leu Leu Arg Ser Val Asp Cys Thr Ser Val Pro Glu		
275	280	285
Trp Phe Met Ser Ser Cys Arg Ser Leu Cys Cys Gly Asp Ile Ser Gln		
290	295	300
Ser Ala Val Leu Phe Leu Cys Gln Gly Thr Leu Ala Met Leu Asp Trp		
305	310	315
Gln Asn Gly Ser Met Gly Arg Ser Gly Glu Ala Leu Leu Leu Asp Thr		

	325		330		335
Ala His Val Leu Phe Thr Leu Ser Ser Gln Ile Lys Glu Pro Thr Leu					
	340		345		350
Glu Met Phe Leu Ser Arg Ile Leu Ala Ser Trp Thr Asn Ser Ala Ile					
	355		360		365
Gln Val Leu Glu Ser Ser Ser Pro Ser Leu Thr Asp Ser Leu Asn Gly					
	370		375		380
Asn Ser Ser Ile Val Gly Arg Leu Leu Glu Tyr Val Tyr Thr His Trp					
385		390		395	400
Glu His Pro Leu Asp Ala Leu Arg His Gln Thr Lys Ile Met Phe Lys					
	405		410		415
Asn Leu Leu Gln Met His Arg Leu Thr Val Glu Gly Ala Asp Phe Val					
	420		425		430
Pro Asp Pro Phe Phe Val Glu Leu Thr Glu Ser Leu Leu Arg Leu Glu					
	435		440		445
Trp His Ile Lys Gly Lys Tyr Thr Cys Leu Gly Cys Leu Val Glu Cys					
	450		455		460
Ile Gly Val Glu His Ile Leu Ala Ile Asp Lys Thr Ile Pro Ser Gln					
465		470		475	480
Ile Leu Glu Val Met Gly Asp Gln Ser Leu Val Pro Tyr Ala Ser Asp					
	485		490		495
Leu Leu Glu Thr Met Phe Arg Asn His Lys Ser His Leu Lys Ser Gln					
	500		505		510
Thr Ala Glu Ser Ser Trp Ile Asp Gln Trp His Glu Thr Trp Val Ser					
	515		520		525
Pro Leu Leu Phe Ile Leu Cys Glu Gly Asn Leu Asp Gln Lys Ser Tyr					
	530		535		540
Val Ile Asp Tyr Tyr Leu Pro Lys Leu Leu Ser Tyr Ser Pro Glu Ser					
545		550		555	560
Leu Gln Tyr Met Val Lys Ile Leu Gln Thr Ser Ile Asp Ala Lys Thr					
	565		570		575
Gly Gln Glu Gln Ser Phe Pro Ser Leu Gly Ser Cys Asn Ser Arg Gly					
	580		585		590
Ala Leu Gly Ala Leu Met Ala Cys Leu Arg Ile Ala Arg Ala His Gly					
	595		600		605
His Leu Gln Ser Ala Thr Asp Thr Trp Glu Asn Leu Val Ser Asp Ala					

610	615	620	
Arg Ile Lys Gln Gly Leu Ile His Gln His Cys Gln Val Arg Ile Asp			
625	630	635	640
Thr Leu Gly Leu Leu Cys Glu Ser Asn Arg Ser Thr Glu Ile Val Ser			
645	650	655	
Met Glu Glu Met Gln Trp Ile Gln Phe Phe Ile Thr Tyr Asn Leu Asn			
660	665	670	
Ser Gln Ser Pro Gly Val Arg Gln Gln Ile Cys Ser Leu Leu Lys Lys			
675	680	685	
Leu Phe Cys Arg Ile Gln Glu Ser Ser Gln Val Leu Tyr Lys Leu Glu			
690	695	700	
Gln Ser Lys Ser Lys Arg Glu Pro Glu Asn Glu Leu Thr Lys Gln His			
705	710	715	720
Pro Ser Val Ser Leu Gln Gln Tyr Lys Asn Phe Met Ser Ser Ile Cys			
725	730	735	
Asn Ser Leu Phe Glu Ala Leu Phe Pro Gly Ser Ser Tyr Ser Thr Arg			
740	745	750	
Phe Ser Ala Leu Thr Ile Leu Gly Ser Ile Ala Glu Val Phe His Val			
755	760	765	
Pro Glu Gly Arg Ile Tyr Thr Val Tyr Gln Leu Ser His Asp Ile Asp			
770	775	780	
Val Gly Arg Phe Gln Thr Leu Met Glu Cys Phe Thr Ser Thr Phe Glu			
785	790	795	800
Asp Val Lys Ile Leu Ala Phe Asp Leu Leu Met Lys Leu Ser Lys Thr			
805	810	815	
Ala Val His Phe Gln Asp Ser Gly Lys Leu Gln Gly Leu Phe Gln Ala			
820	825	830	
Ala Leu Glu Leu Ser Thr Ser Thr Lys Pro Tyr Asp Cys Val Thr Ala			
835	840	845	
Ser Tyr Leu Leu Asn Phe Leu Ile Trp Gln Asp Ala Leu Pro Ser Ser			
850	855	860	
Leu Ser Ala Tyr Leu Thr Gln Gln Val Ala Cys Asp Asn Gly Asp Arg			
865	870	875	880
Pro Ala Ala Val Val Glu Arg Asn Thr Leu Met Val Ile Lys Cys Leu			
885	890	895	
Met Glu Asn Leu Glu Glu Glu Val Ser Gln Ala Glu Asn Ser Leu Leu			

900 905 910
 Gln Ala Ala Ala Ala Phe Pro Met Tyr Gly Arg Val His Cys Ile Thr
 915 920 925
 Gly Ala Leu Gln Lys Leu Ser Leu Lys
 930 935

<210> 3880

<211> 1013

<212> PRT

<213> Homo sapiens

<400> 3880

Met Leu Leu Gln Leu Leu Lys Glu Ser Leu Trp Lys Ile Ser Asp Val
 1 5 10 15
 Ala Trp Thr Ile Gln Leu Thr Gln Asp Phe Lys Gln Gln Met Gly Ser
 20 25 30
 Tyr Ser Asn Asn Ser Thr Glu Lys Lys Phe Leu Trp Lys Ala Leu Gly
 35 40 45
 Thr Thr Leu Ala Cys Cys Gln Asp Ser Asp Phe Val Asn Ser Gln Ile
 50 55 60
 Lys Glu Phe Leu Thr Ala Pro Asn Gln Leu Gly Asp Gln Arg Gln Gly
 65 70 75 80
 Ile Thr Ser Ile Leu Gly Tyr Cys Ala Glu Asn His Leu Asp Ile Val
 85 90 95
 Leu Lys Val Leu Lys Thr Phe Gln Asn Gln Glu Lys Phe Phe Met Asn
 100 105 110
 Arg Cys Lys Ser Leu Phe Ser Gly Lys Lys Ser Leu Thr Lys Thr Asp
 115 120 125
 Val Met Val Ile Tyr Gly Ala Val Ala Leu His Ala Pro Lys Lys Gln
 130 135 140
 Leu Leu Ser Arg Leu Asn Gln Asp Ile Ile Ser Gln Val Leu Ser Leu
 145 150 155 160
 His Gly Gln Cys Ser Gln Val Leu Gly Met Ser Val Met Asn Lys Asp
 165 170 175
 Met Asp Leu Gln Met Ser Phe Thr Arg Ser Ile Thr Glu Ile Gly Ile

180	185	190	
Ala Val Gln Asp Ala Glu Asp Gln Gly Phe Gln Phe Ser Tyr Lys Glu			
195	200	205	
Met Leu Ile Gly Tyr Met Leu Asp Phe Ile Arg Asp Glu Pro Leu Asp			
210	215	220	
Ser Leu Ala Ser Pro Ile Arg Trp Lys Ala Leu Ile Ala Ile Arg Tyr			
225	230	235	240
Leu Ser Lys Leu Lys Pro Gln Leu Ser Leu Gln Asp His Leu Asn Ile			
245	250	255	
Leu Glu Glu Asn Ile Arg Arg Leu Leu Pro Leu Pro Pro Leu Glu Asn			
260	265	270	
Leu Lys Ser Glu Gly Gln Thr Asp Lys Asp Lys Glu His Ile Gln Phe			
275	280	285	
Leu Tyr Glu Arg Ser Met Asp Ala Leu Gly Lys Leu Leu Lys Thr Met			
290	295	300	
Met Trp Asp Asn Val Asn Ala Glu Asp Cys Gln Glu Met Phe Asn Leu			
305	310	315	320
Leu Gln Met Trp Leu Val Ser Gln Lys Glu Trp Glu Arg Glu Arg Ala			
325	330	335	
Phe Gln Ile Thr Ala Lys Val Leu Thr Asn Asp Ile Glu Ala Pro Glu			
340	345	350	
Asn Phe Lys Ile Gly Ser Leu Leu Gly Leu Leu Ala Pro His Ser Cys			
355	360	365	
Asp Thr Leu Pro Thr Ile Arg Gln Ala Ala Ala Ser Ser Thr Ile Gly			
370	375	380	
Leu Phe Tyr Ile Lys Gly Ile His Leu Glu Val Glu Arg Leu Gln Gly			
385	390	395	400
Leu Gln Glu Gly Leu Glu Ser Asp Asp Val Gln Val Gln Ile Lys Ile			
405	410	415	
Ser Ser Lys Ile Ala Lys Ile Val Ser Lys Phe Ile Pro Asn Glu Glu			
420	425	430	
Ile Leu Met Phe Leu Glu Glu Met Leu Asp Gly Leu Glu Ser Leu Asn			
435	440	445	
Pro Thr Cys Thr Lys Ala Cys Gly Ile Trp Met Ile Thr Val Leu Lys			
450	455	460	
Gln Gln Gly Ala Ala Leu Glu Asp Gln Leu Leu Glu Ile Leu Gly Thr			

465	470	475	480
Ile Tyr His His Met Pro Val Leu Arg Gln Lys Glu Glu Ser Phe Gln			
	485	490	495
Phe Ile Leu Glu Ala Ile Ser Gln Ile Ala Ser Phe His Met Asp Thr			
	500	505	510
Val Val Val Asn Leu Leu Gln Lys Pro Leu Pro Phe Asp Arg Asp Thr			
	515	520	525
Lys Thr Leu Trp Lys Ala Leu Ala Glu Lys Pro Ala Ser Ser Gly Lys			
	530	535	540
Leu Leu Gln Ala Leu Ile Asp Lys Leu Glu Thr Glu Leu Glu Asp Asp			
545	550	555	560
Ile Ala Arg Val Glu Ala Ile Ser Val Ala Cys Ala Met Tyr Glu Val			
	565	570	575
Ile Ser Met Gly Thr Ser Val Thr Gly Leu Tyr Pro Glu Leu Phe Thr			
	580	585	590
Leu Leu Leu Lys Leu Val Ser Cys Thr Leu Gly Gln Lys Met Pro Thr			
	595	600	605
Cys Pro Trp Ser His Arg Arg His Val Met Gln Gln Gly Glu Gln Gln			
	610	615	620
Gln Ile Pro Asp Pro Cys Arg Leu Ser Thr Ala Thr Leu Lys Cys Leu			
625	630	635	640
Gln Ala Gln Ala Met Arg Glu Gly Leu Ala Lys Glu Ser Asp Glu Gly			
	645	650	655
Asp Asn Leu Trp Thr Leu Leu Ser Ser Pro Ser Thr His His Ile Gly			
	660	665	670
Val Cys Ser Leu Ala Arg Ser Met Ala Val Trp Gln His Gly Val Ile			
	675	680	685
Leu Asp Ile Met Glu Gln Leu Leu Ser Ser Leu Thr Ser Ser Ser Glu			
	690	695	700
Asn Tyr Arg Ile Thr Gly Ala Ala Phe Phe Ser Glu Leu Met Lys Glu			
705	710	715	720
Pro Ile Leu Trp Lys His Gly Asn Leu Arg Asn Val Leu Ile Leu Met			
	725	730	735
Asp Gln Ser Ala Trp Asp Ser Asn Ala Thr Leu Arg Gln Met Ala Ile			
	740	745	750

Arg Gly Leu Gly Asn Thr Ala Ser Gly Ala Pro His Lys Val Lys Lys
 755 760 765
 His Lys Gln Leu Met Leu Glu Ser Ile Ile Arg Gly Leu Tyr His Leu
 770 775 780
 Ala Arg Thr Glu Val Val Cys Glu Ser Leu Lys Ala Leu Lys Lys Ile
 785 790 795 800
 Leu Glu Leu Leu Thr Asp Arg Asp Val Ser Phe Tyr Phe Lys Glu Ile
 805 810 815
 Val Leu Gln Thr Arg Thr Phe Phe Glu Asp Glu Gln Asp Asp Val Arg
 820 825 830
 Leu Thr Ala Ile Phe Leu Phe Glu Asp Leu Ala Pro Leu Thr Gly Arg
 835 840 845
 Arg Trp Lys Ile Phe Phe Ala Glu Glu Ile Lys Lys Ser Leu Ile Ser
 850 855 860
 Phe Leu Leu His Leu Trp Asp Pro Asn Pro Lys Ile Gly Val Ala Cys
 865 870 875 880
 Arg Asp Val Leu Met Val Cys Ile Pro Phe Leu Gly Leu Gln Glu Leu
 885 890 895
 Tyr Gly Val Leu Asp Arg Leu Leu Asp Gln Asp Leu Pro Arg Ala Arg
 900 905 910
 Asp Phe Tyr Arg Gln Phe Cys Val Lys Leu Ala Glu Lys Asn Gln Glu
 915 920 925
 Ile Leu Trp Ile Leu His Thr His Ser Phe Thr Phe Phe Thr Ser Thr
 930 935 940
 Trp Glu Val Ile Arg Ser Ala Ala Val Lys Leu Thr Asp Ala Val Val
 945 950 955 960
 Leu Asn Leu Thr Ser Gln Tyr Val Glu Leu Leu Asp Arg Glu Gln Leu
 965 970 975
 Thr Thr Arg Leu Gln Ala Leu Arg Gln Asp Pro Cys Ile Ser Val Gln
 980 985 990
 Arg Ala Ala Glu Ala Ala Leu Gln Thr Leu Leu Arg Arg Cys Lys Glu
 995 1000 1005
 Thr Ser Ile Pro Leu
 1010

<210> 3881

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3881

Met Ile Thr Glu Ile Arg Arg Arg Gly Ser Lys Asp Pro Leu Val Lys
 1 5 10 15
 Ala Leu Gln Leu Leu Asp Ser Pro Cys Glu Pro Ala Asp Gly Gly Leu
 20 25 30
 Lys Ser Glu Thr Leu Ala Lys Arg Arg Ser Ser Lys Asp Leu Leu Gly
 35 40 45
 Lys Pro Pro Gln Leu Tyr Asp Thr Pro Tyr Glu Pro Ala Glu Gly Gly
 50 55 60
 Pro Arg Ala Glu Gly Lys Ala Arg Pro Pro Asp Ser Arg Leu Pro Glu
 65 70 75 80
 Asn Asp Glu Arg Pro Ala Ala Glu Tyr Glu Gln Pro Trp Glu Trp Lys
 85 90 95
 Lys Glu Gln Ile Val Arg Ala Leu Ser Val
 100 105

<210> 3882

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3882

Met Leu Thr Thr Ser Gly Gly Gly Thr Gly Pro Leu Glu Gly Leu Gln
 1 5 10 15
 Glu Glu Ala Ser Ile Ser Leu Ile Thr Ala Leu Thr Val Ser Leu Lys
 20 25 30
 Thr Thr Arg Pro Cys Cys Leu Phe Ile Gly Arg Val Ser Pro Ala Phe
 35 40 45
 Asp Gln Leu Leu Trp Asn Ile Ser Thr Leu Pro Cys Arg Leu Pro Cys
 50 55 60

Asp Ser Trp Lys Ser Arg Ser Phe Val Ala Trp Arg Gly Cys Lys Pro
 65 70 75 80
 Arg Ala Ala Ala Pro Asp Ala Phe Ser Glu Gln Ile Pro Gln Arg Gly
 85 90 95
 Cys Leu Thr Ser Glu Met Asn Phe Ser Gln Cys Leu Arg Arg Gly Arg
 100 105 110
 Cys Arg Asn Leu Thr Pro Leu Ser Asn Pro Glu Gln Ser Thr Gln Pro
 115 120 125
 Leu

<210> 3883

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3883

Met His Thr Lys Thr Asp Gln Ala Ala Thr Pro Asn Arg Arg Gln Met
 1 5 10 15
 Thr Ile Leu Leu Leu Leu Thr Ile Arg Ser Ser Thr Leu Leu His Phe
 20 25 30
 Gly Lys Trp Asn Lys Cys Ser Gly Glu Asp Arg Glu His Arg Thr Tyr
 35 40 45
 Leu Pro Gly Gly Asp Ile Lys Glu Gln Pro Gln Asp Leu Gln Asn Lys
 50 55 60
 Val Val Pro Met Asn Tyr Leu Cys Leu Gln Pro His Leu Ala Pro Ser
 65 70 75 80
 Ala Lys Pro Ala Ser Asp Lys Gln Leu Phe Pro Arg Gln Pro Pro Leu
 85 90 95
 Pro Ser Ile Leu Gly Thr His Pro Glu Asn Ser Pro Thr Cys Ser Thr
 100 105 110
 Thr Thr Lys Leu Phe
 115

<210> 3884

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3884

Met Gln Thr Ser Tyr Met Tyr Asn Leu Ile Ser Phe Asp Lys Ile Ile
 1 5 10 15
 His Leu Cys Asn His His Leu Ser Gln Asp Leu Glu His Phe His His
 20 25 30
 Pro Glu Ser Pro Leu Ile Ile Ser Phe Gln Gln Ile Leu Thr Ser Gln
 35 40 45
 Arg Gln Pro Val Thr Ile Asp Tyr Phe Thr Cys Ser Tyr Thr Ser Tyr
 50 55 60
 Val Leu Phe Cys Phe Leu Phe Lys Leu Asn Leu Thr Phe Ser Ile Leu
 65 70 75 80
 Ile Tyr Phe Ala Val Cys Ile Ser Ser Ser Leu Lys Lys Phe Leu Gly
 85 90 95
 Cys Phe Pro Leu Tyr Glu Tyr Pro Thr Ile Asp Ile
 100 105

<210> 3885

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3885

Met Phe Asp Met Gly Phe Glu Pro Gln Val Met Arg Ile Val Asp Asn
 1 5 10 15
 Val Arg Pro Asp Arg Gln Thr Val Met Phe Ser Ala Thr Phe Pro Arg
 20 25 30
 Ala Met Glu Ala Leu Ala Arg Arg Ile Leu Ser Lys Pro Ile Glu Val
 35 40 45
 Gln Val Gly Gly Arg Ser Val Val Cys Ser Asp Val Glu Gln Gln Val
 50 55 60

Ile Val Ile Glu Glu Glu Lys Lys Phe Leu Lys Leu Leu Glu Leu Leu			
65	70	75	80
Gly His Tyr Gln Glu Ser Gly Ser Val Ile Ile Phe Val Asp Lys Gln			
	85	90	95
Glu His Ala Asp Gly Leu Leu Lys Asp Leu Met Arg Ala Ser Tyr Pro			
	100	105	110
Cys Met Ser Leu His Gly Gly Ile Asp Gln Tyr Asp Arg Asp Ser Ile			
	115	120	125
Ile Asn Asp Phe Lys Asn Gly Thr Cys Lys Leu Leu Val Ala Thr Ser			
	130	135	140
Val Ala Ala Arg Gly Leu Asp Val Lys His Leu Ile Leu Val Val Asn			
	145	150	155
Tyr Ser Cys Pro Asn His Tyr Glu Asp Tyr Val His Arg Ala Gly Arg			
	165	170	175
Thr Gly Arg Ala Gly Asn Lys Gly Tyr Ala Tyr Thr Phe Ile Thr Glu			
	180	185	190
Asp Gln Ala Arg Tyr Ala Gly Asp Ile Ile Lys Ala Leu Glu Leu Ser			
	195	200	205
Gly Thr Ala Val Pro Pro Asp Leu Glu Lys Leu Trp Ser Asp Phe Lys			
	210	215	220
Asp Gln Gln Lys Ala Glu Gly Lys Ile Ile Lys Lys Ser Ser Gly Phe			
	225	230	235
Ser Gly Lys Gly Phe Lys Phe Asp Glu Thr Glu Gln Ala Leu Ala Asn			
	245	250	255
Glu Arg Lys Lys Leu Gln Lys Ala Ala Leu Gly Leu Gln Asp Ser Asp			
	260	265	270
Asp Glu Asp Ala Ala Val Asp Ile Asp Glu Gln Ile Glu Ser Met Phe			
	275	280	285
Asn Ser Lys Lys Arg Val Lys Asp Met Ala Ala Pro Gly Thr Ser Ser			
	290	295	300
Val Pro Ala Pro Thr Ala Gly Asn Ala Glu Lys Leu Glu Ile Ala Lys			
	305	310	315
Arg Leu Ala Leu Arg Ile Asn Ala Gln Lys Asn Leu Gly Ile Glu Ser			
	325	330	335
Gln Val Asp Val Met Gln Gln Ala Thr Asn Ala Ile Leu Arg Gly Gly			
	340	345	350

Thr Ile Leu Ala Pro Thr Val Ser Ala Lys Thr Ile Ala Glu Gln Leu
 355 360 365
 Ala Glu Lys Ile Asn Ala Lys Leu Asn Tyr Val Pro Leu Glu Lys Gln
 370 375 380
 Glu Glu Glu Arg Gln Asp Gly Gly Gln Asn Glu Ser Phe Lys Arg Tyr
 385 390 395 400
 Glu Glu Glu Leu Glu Ile Asn Asp Phe Pro Gln Thr Ala Arg Trp Lys
 405 410 415
 Val Thr Ser Lys Glu Ala Leu Gln Arg Ile Ser Glu Tyr Ser Glu Ala
 420 425 430
 Ala Ile Thr Ile Arg Gly Thr Tyr Phe Pro Pro Gly Lys Glu Pro Lys
 435 440 445
 Glu Gly Glu Arg Lys Ile Tyr Leu Ala Ile Glu Ser Ala Asn Glu Leu
 450 455 460
 Ala Val Gln Lys Ala Lys Ala Glu Ile Thr Arg Leu Ile Lys Glu Glu
 465 470 475 480
 Leu Ile Arg Leu Gln Asn Ser Tyr Gln Pro Thr Asn Lys Gly Arg Tyr
 485 490 495
 Lys Val Leu

<210> 3886

<211> 671

<212> PRT

<213> Homo sapiens

<400> 3886

Met Asn Glu Tyr Leu Ser Ser Phe Lys Val Ala Gln Tyr Val Val Arg
 1 5 10 15
 Glu Glu Asp Gly Val Glu Glu Val Glu Arg Glu Ile Ile Lys Gln Glu
 20 25 30
 Glu Asn Val Asp Pro Asp Tyr Trp Glu Lys Leu Leu Arg His His Tyr
 35 40 45
 Glu Gln Gln Gln Glu Asp Leu Ala Arg Asn Leu Gly Lys Gly Lys Arg
 50 55 60

Ile Arg Lys Gln Val Asn Tyr Asn Asp Ala Ser Gln Glu Asp Gln Glu			
65	70	75	80
Trp Gln Asp Glu Leu Ser Asp Asn Gln Ser Glu Tyr Ser Ile Gly Ser			
	85	90	95
Glu Asp Glu Asp Glu Asp Phe Glu Glu Arg Pro Glu Gly Gln Ser Gly			
	100	105	110
Arg Arg Gln Ser Arg Arg Gln Leu Lys Ser Asp Arg Asp Lys Pro Leu			
	115	120	125
Pro Pro Leu Leu Ala Arg Val Gly Gly Asn Ile Glu Val Leu Gly Phe			
	130	135	140
Asn Ala Arg Gln Arg Lys Ala Phe Leu Asn Ala Ile Met Arg Trp Gly			
145	150	155	160
Met Pro Pro Gln Asp Ala Phe Asn Ser His Trp Leu Val Arg Asp Leu			
	165	170	175
Arg Gly Lys Ser Glu Lys Glu Phe Arg Ala Tyr Val Ser Leu Phe Met			
	180	185	190
Arg His Leu Cys Glu Pro Gly Ala Asp Gly Ala Glu Thr Phe Ala Asp			
	195	200	205
Gly Val Pro Arg Glu Gly Leu Ser Arg Gln His Val Leu Thr Arg Ile			
	210	215	220
Gly Val Met Ser Leu Val Arg Lys Lys Val Gln Glu Phe Glu His Val			
225	230	235	240
Asn Gly Lys Tyr Ser Thr Pro Asp Leu Ile Pro Glu Gly Pro Glu Gly			
	245	250	255
Lys Lys Pro Gly Glu Val Ile Ser Ser Asp Pro Asn Thr Pro Val Pro			
	260	265	270
Ala Ser Pro Ala His Leu Leu Pro Ala Pro Leu Gly Leu Pro Asp Lys			
	275	280	285
Met Glu Ala Gln Leu Gly Tyr Met Asp Glu Lys Asp Pro Gly Ala Gln			
	290	295	300
Lys Pro Arg Gln Pro Leu Glu Val Gln Ala Leu Pro Ala Ala Leu Asp			
305	310	315	320
Arg Val Glu Ser Glu Asp Lys His Glu Ser Pro Ala Ser Lys Glu Arg			
	325	330	335
Ala Arg Glu Glu Arg Pro Glu Glu Thr Glu Lys Ala Pro Pro Ser Pro			
	340	345	350

Glu Gln Leu Pro Arg Glu Glu Val Leu Pro Glu Lys Glu Lys Ile Leu			
355	360	365	
Asp Lys Leu Glu Leu Ser Leu Ile His Ser Arg Gly Asp Ser Ser Glu			
370	375	380	
Leu Arg Pro Asp Asp Thr Lys Ala Glu Glu Lys Glu Pro Ile Glu Thr			
385	390	395	400
Gln Gln Asn Gly Asp Lys Glu Glu Asp Asp Glu Gly Lys Lys Glu Asp			
405	410	415	
Lys Lys Gly Lys Phe Lys Phe Met Phe Asn Ile Ala Asp Gly Gly Phe			
420	425	430	
Thr Glu Leu His Thr Leu Trp Gln Asn Glu Glu Arg Ala Ala Val Ser			
435	440	445	
Ser Gly Lys Ile Tyr Asp Ile Trp His Arg Arg His Asp Tyr Trp Leu			
450	455	460	
Leu Ala Gly Ile Val Thr His Gly Tyr Ala Arg Trp Gln Asp Ile Gln			
465	470	475	480
Asn Asp Pro Arg Tyr Met Ile Leu Asn Glu Pro Phe Lys Ser Glu Val			
485	490	495	
His Lys Gly Asn Tyr Leu Glu Met Lys Asn Lys Phe Leu Ala Arg Arg			
500	505	510	
Phe Lys Leu Leu Glu Gln Ala Leu Val Ile Glu Glu Gln Leu Arg Arg			
515	520	525	
Ala Ala Tyr Leu Asn Met Thr Gln Asp Pro Asn His Pro Ala Met Ala			
530	535	540	
Leu Asn Ala Arg Leu Ala Glu Val Glu Cys Leu Ala Glu Ser His Gln			
545	550	555	560
His Leu Ser Lys Glu Ser Leu Ala Gly Asn Lys Pro Ala Asn Ala Val			
565	570	575	
Leu His Lys Val Leu Asn Gln Leu Glu Glu Leu Leu Ser Asp Met Lys			
580	585	590	
Ala Asp Val Thr Arg Leu Pro Ser Met Leu Ser Arg Ile Pro Pro Val			
595	600	605	
Ala Ala Arg Leu Gln Met Ser Glu Arg Ser Ile Leu Ser Arg Leu Thr			
610	615	620	
Asn Arg Ala Gly Asp Pro Thr Ile Gln Gln Ile Ser Ser Arg Pro Arg			
625	630	635	640

Asp Phe Pro Val Leu Gln Arg Ser Phe Pro Ala Glu Pro Arg Leu Pro
 645 650 655
 Gly His Leu Pro Asp Pro His Gly Arg Glu Lys Leu Pro Pro Phe
 660 665 670

<210> 3887

<211> 794

<212> PRT

<213> Homo sapiens

<400> 3887

Met Gly Arg Lys Leu Asp Leu Ser Gly Leu Thr Asp Asp Glu Thr Glu
 1 5 10 15
 His Val Leu Gln Val Val Gln Arg Asp Phe Asn Leu Arg Lys Lys Glu
 20 25 30
 Glu Glu Arg Leu Ser Glu Leu Lys Gln Lys Leu Asp Glu Glu Gly Ser
 35 40 45
 Lys Cys Ser Ile Leu Ser Lys His Gln Gln Phe Val Glu His Cys Cys
 50 55 60
 Met Arg Cys Cys Ser Pro Phe Thr Phe Leu Val Asn Thr Lys Arg Gln
 65 70 75 80
 Cys Gly Asp Cys Lys Phe Asn Val Cys Lys Ser Cys Cys Ser Tyr Gln
 85 90 95
 Lys His Glu Lys Ala Trp Val Cys Cys Val Cys Gln Gln Ala Arg Leu
 100 105 110
 Leu Arg Ala Gln Ser Leu Glu Trp Phe Tyr Asn Asn Val Lys Ser Arg
 115 120 125
 Phe Lys Arg Phe Gly Ser Ala Lys Val Leu Lys Asn Leu Tyr Arg Lys
 130 135 140
 His Arg Leu Glu Ser Gly Ala Cys Phe Asp Ile Leu Gly Gly Ser Leu
 145 150 155 160
 Phe Glu Ser Asn Leu Glu Asn Glu Gly Ser Ile Ser Gly Ser Asp Ser
 165 170 175
 Thr Phe Tyr Arg Gln Ser Glu Gly His Ser Val Met Asp Thr Leu Ala
 180 185 190

Val	Ala	Leu	Arg	Val	Ala	Glu	Glu	Ala	Ile	Glu	Glu	Ala	Ile	Ser	Lys
	195				200					205					
Ala	Glu	Ala	Tyr	Gly	Asp	Ser	Leu	Asp	Lys	Gln	Asn	Glu	Ala	Ser	Tyr
	210				215					220					
Leu	Arg	Asp	His	Lys	Glu	Glu	Leu	Thr	Glu	Glu	Leu	Ala	Thr	Thr	Ile
225				230						235					240
Leu	Gln	Lys	Ile	Ile	Arg	Lys	Gln	Lys	Ser	Lys	Ser	Glu	Gln	Gln	Val
			245					250						255	
Glu	Glu	Glu	Pro	Gly	Trp	Pro	His	Pro	Gln	Ser	Cys	Ser	Thr	Lys	Val
	260						265						270		
Ala	Asp	Glu	Gly	Thr	Ser	Ala	Ser	Pro	Gly	Gly	Tyr	Arg	Ala	Pro	Ala
	275						280					285			
Ala	Leu	Trp	Arg	Ser	Gln	Ser	Ala	Phe	Ser	Ile	Thr	Gly	Glu	Glu	Ala
	290						295					300			
Leu	Lys	Thr	Pro	Pro	Val	Glu	Ala	Pro	Ser	Arg	Gln	Pro	Arg	Asp	Gln
305					310					315					320
Gly	Gln	His	Pro	Arg	Ala	Glu	Ser	Ala	Leu	Pro	Ser	Trp	Lys	Ser	Val
			325						330					335	
Asp	Arg	Leu	Asp	Glu	Thr	Asn	Leu	Ala	Pro	Val	Leu	Gln	Ser	Pro	Asp
	340							345					350		
Gly	Asn	Trp	Val	Ala	Leu	Lys	Asp	Gly	Ala	Pro	Pro	Pro	Thr	Arg	Leu
	355						360						365		
Leu	Ala	Lys	Pro	Lys	Ser	Gly	Thr	Phe	Gln	Ala	Leu	Glu	Val	Ala	Ser
	370					375						380			
Ser	Val	Ala	Ser	Ala	Tyr	Asp	Glu	Met	Gly	Ser	Asp	Ser	Glu	Glu	Asp
385				390						395					400
Phe	Asp	Trp	Ser	Glu	Ala	Leu	Ser	Lys	Leu	Cys	Pro	Arg	Ser	Arg	Ala
			405						410					415	
Leu	Pro	Arg	Asn	Pro	Gln	Pro	Gln	Pro	Thr	Gln	Ala	Gln	Ser	Ser	Asp
	420						425						430		
Gln	Gly	Pro	Ile	Ala	Ala	Ser	Pro	Ser	Ser	Ala	Leu	Ser	Pro	Asn	Pro
	435					440						445			
Glu	Ala	Met	Cys	Ser	Asp	Ser	Glu	Thr	Ser	Ser	Ala	Gly	Ser	Ser	Arg
	450					455						460			
Glu	Val	Gly	His	Gln	Ala	Arg	Leu	Ser	Trp	Leu	Gln	Arg	Lys	Ala	Pro
465					470						475				480

Arg Asn Pro Ala Ala Glu Lys Met Arg Leu His Gly Glu Leu Asp Val			
485	490	495	
Asn Phe Asn Pro Gln Leu Ala Ser Arg Glu Thr Ser Asp Ser Ser Glu			
500	505	510	
Pro Glu Glu Ala Pro His Thr Thr Asp Arg Arg Ala Arg Arg Trp Arg			
515	520	525	
Gly Ala Arg Leu Gly Ser Glu Gly Pro Ser Lys Glu Pro Ser Ser Pro			
530	535	540	
Ser Ala Gln Leu Arg Asp Leu Asp Thr His Gln Val Ser Asp Asp Leu			
545	550	555	560
Ser Glu Thr Asp Ile Ser Asn Glu Ala Arg Asp Pro Gln Thr Leu Thr			
565	570	575	
Asp Thr Thr Glu Glu Lys Arg Arg Asn Arg Leu Tyr Glu Leu Ala Met			
580	585	590	
Lys Met Ser Glu Lys Glu Thr Ser Ser Gly Glu Asp Gln Glu Ser Glu			
595	600	605	
Pro Lys Thr Glu Ser Glu Asn Gln Lys Glu Ser Leu Ser Ser Glu Asp			
610	615	620	
Asn Ser Gln Ser Val Gln Glu Glu Leu Lys Lys Val Tyr Leu Ala Ala			
625	630	635	640
Gly Thr Val Tyr Gly Leu Glu Thr Gln Leu Thr Glu Leu Glu Asp Ala			
645	650	655	
Ala Arg Cys Ile His Ser Gly Thr Asp Glu Thr His Leu Ala Asp Leu			
660	665	670	
Glu Asp Gln Val Ala Thr Ala Ala Ala Gln Val His His Ala Glu Leu			
675	680	685	
Gln Ile Ser Asp Ile Glu Ser Arg Ile Ser Ala Leu Thr Ile Ala Gly			
690	695	700	
Leu Asn Ile Ala Pro Cys Val Arg Phe Thr Arg Arg Arg Asp Gln Lys			
705	710	715	720
Gln Arg Thr Gln Val Gln Thr Ile Asp Thr Ser Arg Gln Gln Arg Arg			
725	730	735	
Lys Leu Pro Ala Pro Pro Val Lys Ala Glu Lys Ile Glu Thr Ser Ser			
740	745	750	
Val Thr Thr Ile Lys Thr Phe Asn His Asn Phe Ile Leu Gln Gly Ser			
755	760	765	

Ser Thr Asn Arg Thr Lys Glu Arg Lys Gly Thr Thr Lys Asp Leu Met
 770 775 780

Glu Pro Ala Leu Glu Ser Ala Val Met Tyr
 785 790

<210> 3888

<211> 1233

<212> PRT

<213> Homo sapiens

<400> 3888

Met Gly Thr Arg Ala Phe Ser His Asp Ser Ile Phe Ile Pro Asp Gly
 1 5 10 15
 Gly Ala Glu Ser Glu Gln Thr Val Gln Ala Met Ser Gln Asp Asn Ile
 20 25 30
 Leu Gly Lys Val Lys Thr Leu Gln Gln Gln Leu Gly Lys Asn Ile Lys
 35 40 45
 Phe Gly Gln Arg Ser Pro Asn Ala Ile Pro Met Asn Lys Ala Asn Ser
 50 55 60
 Gly Glu Ala Ser Leu Glu Glu Asp Leu Phe Leu Thr Ser Pro Met Glu
 65 70 75 80
 Ile Val Thr Gln Gln Asp Ile Val Leu Ser Asp Ala Glu Asn Lys Ser
 85 90 95
 Ser Asp Thr Pro Ser Ser Leu Ser Pro Leu Asn Leu Pro Gly Ala Gly
 100 105 110
 Ser Glu Met Glu Glu Lys Val Ala Pro Val Lys Pro Ser Arg Pro Lys
 115 120 125
 Arg His Phe Ser Ser Ala Gly Thr Ile Glu Ser Val Asn Leu Asp Ala
 130 135 140
 Ile Pro Leu Ala Ile Ala Arg Leu Asp Asn Ser Ala Ala Lys His Lys
 145 150 155 160
 Leu Ala Val Lys Pro Lys Lys Gln Arg Val Ser Lys Lys His Arg Arg
 165 170 175
 Leu Ala Gln Asp Pro Gln His Glu Gln Gly Gly Leu Glu Ser Arg Pro
 180 185 190

Cys Leu Asp Gln Asn Gly His Pro Gly Glu Asp Lys Pro Thr Trp His			
195	200	205	
Glu Glu Glu Pro Asn Pro Leu Asp Ser Glu Glu Glu Arg Arg Arg Gln			
210	215	220	
Glu Asp Tyr Trp Arg Glu Leu Glu Ala Lys Cys Lys Arg Gln Lys Ala			
225	230	235	240
Glu Ala Ala Glu Lys Arg Arg Leu Glu Glu Gln Arg Leu Gln Ala Leu			
245	250	255	
Glu Arg Arg Leu Trp Glu Glu Asn Arg Arg Gln Glu Leu Leu Glu Glu			
260	265	270	
Glu Gly Glu Gly Gln Glu Pro Pro Leu Glu Ala Glu Arg Ala Pro Arg			
275	280	285	
Glu Glu Gln Gln Arg Ser Leu Glu Ala Pro Arg Trp Glu Asp Ala Glu			
290	295	300	
Arg Arg Glu Arg Glu Glu Arg Glu Arg Leu Glu Ala Glu Glu Glu Arg			
305	310	315	320
Arg Arg Leu Gln Ala Gln Ala Gln Ala Glu Glu Arg Arg Arg Leu Glu			
325	330	335	
Glu Asp Ala Arg Leu Glu Glu Arg Arg Arg Gln Glu Glu Glu Glu Gly			
340	345	350	
Arg Cys Ala Glu Glu Leu Lys Arg Gln Glu Glu Glu Glu Ala Glu Gly			
355	360	365	
Trp Glu Glu Leu Glu Gln Gln Glu Ala Glu Val Gln Gly Pro Pro Glu			
370	375	380	
Ala Leu Glu Glu Thr Gly Glu Gly Arg Arg Gly Ala Glu Glu Glu Asp			
385	390	395	400
Leu Gly Glu Glu Glu Glu Glu Gly Gln Ala His Leu Glu Asp Trp Arg			
405	410	415	
Gly Gln Leu Ser Glu Leu Leu Asn Asp Phe Glu Glu Arg Leu Glu Asp			
420	425	430	
Gln Glu Arg Leu Lys Pro Glu Gly Gln Arg Glu His Ser Glu Glu Pro			
435	440	445	
Gly Ile Cys Glu Glu Gln Asn Pro Glu Ala Glu Arg Arg Arg Glu Gln			
450	455	460	
Gln Gly Arg Ser Gly Asp Phe Gln Gly Ala Asp Arg Pro Gly Pro Glu			
465	470	475	480

Glu Lys Arg Glu Glu Gly Asp Thr Glu Pro Leu Leu Lys Gln Glu Gly			
485	490	495	
Pro Val Glu Ala Ala Gln Pro Pro Val Glu Arg Lys Glu Ala Ala Ala			
500	505	510	
Leu Glu Gln Gly Arg Lys Val Glu Glu Leu Arg Trp Gln Glu Val Asp			
515	520	525	
Glu Arg Gln Thr Met Pro Arg Pro Tyr Thr Phe Gln Val Ser Ser Gly			
530	535	540	
Gly Lys Gln Ile Leu Phe Pro Lys Val Asn Leu Ser Pro Val Thr Pro			
545	550	555	560
Ala Lys Asp Thr Gly Leu Thr Ala Ala Pro Gln Glu Pro Lys Ala Pro			
565	570	575	
Lys Ala Ser Pro Val Gln His Ala Leu Pro Ser Ser Leu Ser Val Pro			
580	585	590	
His Thr Ala Ile Leu Val Thr Gly Ala Gln Leu Cys Gly Pro Ala Val			
595	600	605	
Asn Leu Ser Gln Ile Lys Asp Thr Ala Cys Lys Ser Leu Leu Gly Leu			
610	615	620	
Glu Glu Lys Lys His Ala Glu Ala Pro Ala Gly Glu Asn Pro Pro Arg			
625	630	635	640
Gly Pro Gly Asp Ala Arg Ala Gly Ser Gly Lys Ala Lys Leu Pro Gln			
645	650	655	
Glu Ser Pro Ser Ser Ala Ser Ala Leu Ala Glu Trp Ala Ser Ile Arg			
660	665	670	
Ser Arg Ile Leu Lys Asn Ala Glu Ser Asp Pro Arg Ser Ser Glu Arg			
675	680	685	
Asp Gln Leu Arg Pro Gly Asp Glu Ser Thr Pro Arg Gly Arg Cys Asp			
690	695	700	
Ser Arg Gly Asn Gln Arg Lys Thr Pro Pro Val Asn Ala Lys Phe Ser			
705	710	715	720
Ile Met Pro Ala Trp Gln Lys Phe Ser Asp Gly Gly Thr Glu Thr Ser			
725	730	735	
Lys Gln Ser Thr Glu Ala Glu Ser Ile Arg Lys Arg Pro Met Leu Gly			
740	745	750	
Pro Ser Glu Glu Thr Ala Pro Gln Pro Pro Pro Ala Gly Val Arg Glu			
755	760	765	

Leu Gly Lys Gly Pro Glu Lys Leu Gly Met His Arg Glu Pro Ala Asp
 770 775 780
 Thr Thr Glu Gly Cys Lys Phe Ala Lys Asp Leu Pro Ser Phe Leu Val
 785 790 795 800
 Pro Ser Leu Pro Tyr Pro Pro Gln Lys Val Val Ala His Thr Glu Phe
 805 810 815
 Thr Thr Ser Ser Asp Ser Glu Thr Ala Asn Gly Ile Ala Lys Pro Asp
 820 825 830
 Pro Val Met Pro Gly Gly Glu Glu Lys Ala Ser Pro Phe Gly Ile Lys
 835 840 845
 Leu Arg Arg Thr Asn Tyr Ser Leu Arg Phe Asn Cys Asp Gln Gln Ala
 850 855 860
 Glu Gln Lys Lys Lys Lys Arg His Ser Ser Thr Gly Asp Ser Ala Asp
 865 870 875 880
 Ala Gly Pro Pro Ala Ala Gly Ser Ala Arg Gly Glu Lys Glu Met Glu
 885 890 895
 Gly Val Ala Leu Lys His Gly Pro Ser Leu Pro Gln Glu Arg Lys Gln
 900 905 910
 Ala Pro Ser Thr Arg Arg Asp Ser Ala Glu Pro Ser Ser Ser Arg Ser
 915 920 925
 Val Pro Val Ala His Pro Gly Pro Pro Pro Ala Ser Ser Gln Thr Pro
 930 935 940
 Ala Pro Glu His Asp Lys Ala Ala Asn Lys Met Pro Leu Ala Gln Lys
 945 950 955 960
 Pro Ala Leu Ala Pro Lys Pro Thr Ser Gln Thr Pro Pro Ala Ser Pro
 965 970 975
 Leu Ser Lys Leu Ser Arg Pro Tyr Leu Val Glu Leu Leu Ser Arg Arg
 980 985 990
 Ala Gly Arg Pro Asp Pro Glu Pro Ser Glu Pro Ser Lys Glu Asp Gln
 995 1000 1005
 Glu Ser Ser Asp Arg Arg Pro Pro Ser Pro Pro Gly Pro Glu Glu Arg
 1010 1015 1020
 Lys Gly Gln Lys Arg Asp Glu Glu Glu Glu Ala Thr Glu Arg Lys Pro
 1025 1030 1035 1040
 Ala Ser Pro Pro Leu Pro Ala Thr Gln Gln Glu Lys Pro Ser Gln Thr
 1045 1050 1055

Pro Glu Ala Gly Arg Lys Glu Lys Pro Met Leu Gln Ser Arg His Ser
 1060 1065 1070
 Leu Asp Gly Ser Lys Leu Thr Glu Lys Val Glu Thr Ala Gln Pro Leu
 1075 1080 1085
 Trp Ile Thr Leu Ala Leu Gln Lys Gln Lys Gly Phe Arg Glu Gln Gln
 1090 1095 1100
 Ala Thr Arg Glu Glu Arg Lys Gln Ala Arg Glu Ala Lys Gln Ala Glu
 1105 1110 1115 1120
 Lys Leu Ser Lys Glu Asn Val Ser Val Ser Val Gln Pro Gly Ser Ser
 1125 1130 1135
 Ser Val Ser Arg Ala Gly Ser Leu His Lys Ser Thr Ala Leu Pro Glu
 1140 1145 1150
 Glu Lys Arg Pro Glu Thr Ala Val Ser Arg Leu Glu Arg Arg Glu Gln
 1155 1160 1165
 Leu Lys Lys Ala Asn Thr Leu Pro Thr Ser Val Thr Val Glu Ile Ser
 1170 1175 1180
 Asp Ser Ala Pro Pro Ala Pro Leu Val Lys Glu Val Thr Lys Arg Phe
 1185 1190 1195 1200
 Ser Thr Pro Asp Ala Ala Pro Val Ser Thr Glu Pro Ala Trp Leu Ala
 1205 1210 1215
 Leu Ala Lys Arg Lys Ala Lys Ala Trp Ser Asp Cys Pro Gln Ile Ile
 1220 1225 1230
 Lys

<210> 3889

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3889

Met Leu Thr Asp Val Cys His Leu Val Thr Ser Phe Gln Val Phe Pro
 1 5 10 15
 Pro Pro Leu Ser Phe Leu Ser Ser Leu Leu Cys Cys Phe Lys Ile Cys
 20 25 30

Met Ser Leu Thr Gly Met Pro Val Thr Ser Ala Asn Phe Val Ser Ser
 35 40 45
 Leu Pro His Glu Met Ile Leu Leu Lys Gly Thr Arg Tyr Val Ser Ile
 50 55 60
 Cys Thr Ser Leu Lys Ala Ser Gly Tyr Gly Pro Leu Thr His Trp Ser
 65 70 75 80
 Trp Leu Gln Asn Asn Ser Ala Glu Thr Ser Phe Gln Leu Lys Ile Pro
 85 90 95
 Ser Asn Val Thr Gln Gly Arg Asn Ile Ala Pro Ile Ile Lys Gly Gly
 100 105 110
 Asn Gly Gln Arg Gly Ser Ala Ala Gly Ser Gln Lys Arg Lys Val Arg
 115 120 125
 Val Leu Phe Ile Cys
 130

<210> 3890

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3890

Met Gln Leu His Asp Arg Gly Leu Arg His Leu Phe Ser Ala Pro Ala
 1 5 10 15
 Gly Ser Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 20 25 30
 Asn Gly Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 35 40 45
 Asn Arg Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 50 55 60
 Asn Arg Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Ser Gln Met
 65 70 75 80
 Asn Arg Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Ser Gln Ile
 85 90 95
 Asn Gly Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 100 105 110

Asn	His	Trp	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Pro	Gln	Ile
115				120				125							
Asn	Arg	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Pro	Gln	Ile
130				135				140							
Asn	His	Trp	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Ser	Gln	Ile
145				150				155				160			
Asn	Cys	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Arg				
165				170											

<210> 3891

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3891

Met	Ala	Phe	Ser	Ser	Ser	Gln	Ala	Pro	Tyr	Leu	Ser	Pro	Ala	Val	Pro
1				5					10					15	
Phe	Ser	Gly	Thr	Ile	Gln	Gly	Gly	Leu	Gln	Asp	Gly	Leu	Gln	Ile	Thr
			20					25					30		
Val	Asn	Gly	Thr	Val	Leu	Ser	Ser	Ser	Gly	Thr	Arg	Phe	Ala	Val	Asn
		35					40					45			
Phe	Gln	Thr	Gly	Phe	Ser	Gly	Asn	Asp	Ile	Ala	Phe	His	Phe	Asn	Pro
	50					55				60					
Arg	Phe	Glu	Asp	Gly	Gly	Tyr	Val	Val	Cys	Asn	Thr	Arg	Gln	Asn	Gly
65				70					75					80	
Ser	Trp	Gly	Pro	Glu	Glu	Arg	Lys	Thr	His	Met	Pro	Phe	Gln	Lys	Gly
			85					90					95		
Met	Pro	Phe	Asp	Leu	Cys	Phe	Leu	Val	Gln	Ser	Ser	Asp	Phe	Lys	Val
		100						105				110			
Met	Val	Asn	Gly	Ile	Leu	Phe	Val	Gln	Tyr	Phe	His	Arg	Val	Pro	Phe
	115						120				125				
His	Arg	Val	Asp	Thr	Ile	Ser	Val	Asn	Gly	Ser	Val	Gln	Leu	Ser	Tyr
	130					135				140					
Ile	Ser	Phe	Gln	Pro	Pro	Gly	Val	Trp	Pro	Ala	Asn	Pro	Ala	Pro	Ile
145				150					155						160

Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
 165 170 175
 Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
 180 185 190
 Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
 195 200 205
 Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile
 210 215 220
 Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Pro Arg Phe
 225 230 235 240
 Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
 245 250 255
 Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
 260 265 270
 Ser Phe Ser Val Trp Ile Leu Cys Glu Ala His Cys Leu Lys Val Ala
 275 280 285
 Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
 290 295 300
 Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His
 305 310 315 320
 Val Gln Thr

<210> 3892

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3892

Met Pro Ser Met Leu Val Val Asn Val His Leu Ala Pro Gly Arg Ala
 1 5 10 15
 Asn Pro His Gly Val Cys Val Asn Thr Ser Leu Asn His Ser Leu Ile
 20 25 30
 Tyr Pro Ile Phe Val Val His Val Ser Arg Ile Gln Cys Leu Cys Ser
 35 40 45

Arg Ile Trp Phe Ser Leu His Val Phe Gly Val Cys Ala Tyr Arg Cys
 50 55 60
 Ala Trp Cys Gly Leu Ser Pro Arg Pro Val Cys Lys Arg His Pro Thr
 65 70 75 80
 Gln Arg Pro Arg Gln Asp Pro Gly Leu Trp Ala Val Val Pro Gly Leu
 85 90 95
 Pro Leu Gln Gly Arg Cys Val Leu Leu Arg Glu His Pro Cys Leu Gly
 100 105 110
 Ser Asn Pro Gly Ser Gly Arg Gln Val Val Gly Val Ala Ala Ser Ser
 115 120 125
 Ala Ser Leu Asp Asp Ala Gln Glu His Ala Gln Ser Gln Arg Ala Gln
 130 135 140
 Leu Leu Gly Ser Leu Thr Leu Gly Trp Ala Leu Gly Arg Gln Pro Phe
 145 150 155 160
 Gly Glu Cys Val Leu Met Val Val Ser Gly Val Ser Leu Thr Asn Asn
 165 170 175
 Pro Pro Cys Pro Leu Asp Thr Gly Val Pro Ser Ser Leu Ala Val Phe
 180 185 190
 Leu Ile Arg Val Pro His Arg Pro Thr Ala Arg Cys Val Ser Pro Asp
 195 200 205
 Leu

<210> 3893

<211> 465

<212> PRT

<213> Homo sapiens

<400> 3893

Met Gly Val Glu Ala Val Met Ala Leu Leu Glu Gly Thr Pro Asp Thr
 1 5 10 15
 Pro Ala Cys Val Val Ser Leu Ser Gly Asn Gln Ala Val Arg Leu Pro
 20 25 30
 Leu Met Glu Cys Val Gln Val Thr Lys Asp Val Thr Lys Ala Met Asp
 35 40 45

Glu Lys Lys Phe Asp Glu Ala Leu Lys Leu Arg Gly Arg Ser Phe Met

50	55	60
Asn Asn Trp Glu Val Tyr Lys Leu Leu Ala His Val Arg Pro Pro Val		
65	70	75
Ser Lys Ser Gly Ser His Thr Val Ala Val Met Asn Val Gly Ala Pro		
85	90	95
Ala Ala Gly Met Asn Ala Ala Val Arg Ser Thr Val Arg Ile Gly Leu		
100	105	110
Ile Gln Gly Asn Arg Val Leu Val Val His Asp Gly Phe Glu Gly Leu		
115	120	125
Ala Lys Gly Gln Ile Glu Glu Ala Gly Trp Ser Tyr Val Gly Gly Trp		
130	135	140
Thr Asp Gln Gly Gly Ser Lys Leu Gly Thr Lys Arg Thr Leu Pro Lys		
145	150	155
Lys Ser Phe Glu Gln Ile Ser Ala Asn Ile Thr Lys Phe Asn Ile Gln		
165	170	175
Gly Leu Val Ile Ile Gly Gly Phe Glu Ala Tyr Thr Gly Gly Leu Glu		
180	185	190
Leu Met Glu Gly Arg Lys Gln Phe Asp Glu Leu Cys Ile Pro Phe Val		
195	200	205
Val Ile Pro Ala Thr Val Ser Asn Asn Val Pro Gly Ser Asp Phe Ser		
210	215	220
Val Gly Ala Asp Thr Ala Leu Asn Thr Ile Cys Thr Thr Cys Asp Arg		
225	230	235
Ile Lys Gln Ser Ala Ala Gly Thr Lys Arg Arg Val Phe Ile Ile Glu		
245	250	255
Thr Met Gly Gly Tyr Cys Gly Tyr Leu Ala Thr Met Ala Gly Leu Ala		
260	265	270
Ala Gly Ala Asp Ala Ala Tyr Ile Phe Glu Glu Pro Phe Thr Ile Arg		
275	280	285
Asp Leu Gln Ala Asn Val Glu His Leu Val Gln Lys Met Lys Thr Thr		
290	295	300
Val Lys Arg Gly Leu Val Leu Arg Asn Glu Lys Cys Asn Glu Asn Tyr		
305	310	315
Thr Thr Asp Phe Ile Phe Asn Leu Tyr Ser Glu Glu Gly Lys Gly Ile		

325 330 335
 Phe Asp Ser Arg Lys Asn Val Leu Gly His Met Gln Gln Gly Gly Ser
 340 345 350
 Pro Thr Pro Phe Asp Arg Asn Phe Ala Thr Lys Met Gly Ala Lys Ala
 355 360 365
 Met Asn Trp Met Ser Gly Lys Ile Lys Glu Ser Tyr Arg Asn Gly Arg
 370 375 380
 Ile Phe Ala Asn Thr Pro Asp Ser Gly Cys Val Leu Gly Met Arg Lys
 385 390 395 400
 Arg Ala Leu Val Phe Gln Pro Val Ala Glu Leu Lys Asp Gln Thr Asp
 405 410 415
 Phe Glu His Arg Ile Pro Lys Glu Gln Trp Trp Leu Lys Leu Arg Pro
 420 425 430
 Ile Leu Lys Ile Leu Ala Lys Tyr Glu Ile Asp Leu Asp Thr Ser Asp
 435 440 445
 His Ala His Leu Glu His Ile Thr Arg Lys Arg Ser Gly Glu Ala Ala
 450 455 460
 Val
 465

<210> 3894

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3894

Met Thr Asp Gly Thr Asn Trp Pro Gln Gln Ile His Ser Arg Ala Ser
 1 5 10 15
 Thr Ser Leu Ala Ser Pro Ser His Pro Gly Leu Arg Ser Thr Gly Leu
 20 25 30
 Glu Ala Gly Pro Gln Val His Arg Val Glu Ala Ala Trp Leu Gln Glu
 35 40 45
 Ser Asp Gly Gly Val Arg Pro Leu Arg Leu Ser Gln Pro Ala Cys Trp
 50 55 60
 Pro Cys Leu Pro Arg His Arg Glu Gly Trp Cys Thr Ser Pro Arg Gln

65 70 75 80
 Asp Cys Glu Pro Glu Arg Gly Gly Met Glu Val Glu Leu Glu Pro Cys
 85 90 95
 Pro His Leu Ser Leu Leu Ile Arg Gly Gly Pro Val Gly Phe Leu Pro
 100 105 110
 Ala Gly Ser Pro Arg Ala Ala Trp Lys Ala Leu Ile Gly Arg Ala Leu
 115 120 125
 Val Ala Val Thr Trp Lys Leu Ala Val Leu Gly Arg Gly Ala Phe Cys
 130 135 140
 Ser Phe Gln Gly His Ser Val Phe Leu His Ala Asp Pro Leu
 145 150 155

<210> 3895

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3895

Met Gly Ser Ser Gly Leu Leu Ser Leu Leu Val Leu Phe Val Leu Leu
 1 5 10 15
 Ala Asn Val Gln Gly Pro Gly Leu Thr Asp Trp Leu Phe Pro Arg Arg
 20 25 30
 Cys Pro Lys Ile Arg Glu Glu Cys Glu Phe Gln Glu Arg Asp Val Cys
 35 40 45
 Thr Lys Asp Arg Gln Cys Gln Asp Asn Lys Lys Cys Cys Val Phe Ser
 50 55 60
 Cys Glu Lys Lys Cys Leu Asp Leu Lys Gln Gly Asn Ile Gln Ser Cys
 65 70 75 80
 Arg Ile Thr Asn Pro Ser Ser Pro Cys Pro His Leu Leu Pro Ser Trp
 85 90 95
 Thr Gly Phe Val Pro
 100

<210> 3896

<211> 1315

<212> PRT

<213> Homo sapiens

<400> 3896

Met Asn Phe Leu Ser Thr Ala Glu Ser Arg Thr Ala Gln Ala Ala Ala
 1 5 10 15
 Ser Gly Thr Thr Leu Leu Pro Gln Phe Arg Ala Pro Ser Trp Gln Thr
 20 25 30
 Gly Met His Ser Ser Ala Ala Thr Glu Leu Phe Ala Thr Gly Pro Leu
 35 40 45
 Pro Ser Thr Gly Thr Leu Pro Pro Ser Leu Ser Ala Tyr Gln His Pro
 50 55 60
 Thr Thr Phe Ser Asn Arg Asn Phe Ala Thr Thr Ser Pro Leu Val Leu
 65 70 75 80
 Gln Asp Ser Thr Phe Asn Thr Thr Ser Asn Gly Ile Leu Ser His His
 85 90 95
 Asp Pro Leu Leu Gln Ile Lys Thr Ser Gln Gly Thr Val Pro Thr Ala
 100 105 110
 Leu Ala Phe Glu Arg Leu Gly Ser Ser Val Leu Ser Asn Ser Ile Pro
 115 120 125
 Pro Gln Ser Ser Thr Tyr Arg Ser Ala Gln Glu Ser Ala Pro His Leu
 130 135 140
 Leu Gln Pro Gln Phe Ser Leu Leu Pro Ser Ala Leu Gly Gly Ser Gln
 145 150 155 160
 Gln Thr Pro Gln Ala Tyr Ser Ser Thr Leu Phe Thr Ser Ser Thr Ala
 165 170 175
 Ser Ile Glu Arg Ala Leu Leu Arg Glu Cys Ser Val Ile Lys His His
 180 185 190
 Gln Arg Pro Ser Gly Thr Gln Ser Ile Gln Ala Gln Leu Thr Gly Ser
 195 200 205
 Gln His Ser Leu His Ser Tyr Leu Ser Asn Ser Ser Val Val Asn Phe
 210 215 220
 Gln Glu Thr Thr Arg Gln Ser Ser Leu Ser Cys Ser Pro Ile Gly Asp
 225 230 235 240
 Ser Thr Gln Asn Leu Pro Asp Ser Ser Pro Thr Gln Asn Tyr Ile Ser

	245		250		255
Met His Ser Ser Gln Asn Val Gln Thr Gln Glu Ser Ser Ser Pro Gln					
	260		265		270
Ser Gln Lys Phe Leu Pro Ala Val Gln Ser Ser Ser Phe Ala Ser Ser					
	275		280		285
Thr His Cys Gln Thr Leu Gln Asn Asn Ile Thr Ser Pro Asp Pro Lys					
	290		295		300
Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys					
305		310		315	320
Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln					
	325		330		335
Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn					
	340		345		350
Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser					
	355		360		365
Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly					
	370		375		380
Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val					
385		390		395	400
Thr Gln Leu Asn Gln Gln Ile Gly Gln Val Asn Asn Ala Ala Thr Leu					
	405		410		415
Asp Leu Lys Asn Ser Thr Asn Leu Ile Gln Thr Pro Gln Ile Arg Leu					
	420		425		430
Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu Ile Leu Lys Val His					
	435		440		445
Glu Ser Lys Val Gln Glu Gln His Asp Gln Ile Ile Asn Ala Ser Ser					
	450		455		460
Gln Ile Gln Ile Pro Asn His Ala Leu Gly His Gly His Gln Ala Ser					
465		470		475	480
Leu Pro Asn Thr Gln Val Leu Leu Asp Ser Ala Cys Asp Leu Gln Ile					
	485		490		495
Leu Gln Gln Ser Ile Leu Gln Ala Gly Leu Gly Gln Val Lys Ala Ser					
	500		505		510
Leu Gln Ala Gln Arg Val Gln Ser Pro Gln Gln Ile Val His Pro Phe					
	515		520		525
Leu Gln Met Glu Gly His Val Ile Gln Ser Asn Gly Asp His Ser Gln					

530	535	540	
Gln Gln Leu His Pro	Gln Asn Ser Glu Val	Met Lys Met Asp Leu Ser	
545	550	555	560
Glu Ser Ser Lys Pro	Leu Gln Gln His Leu Thr	Thr Lys Gly His Phe	
	565	570	575
Ser Glu Thr Asn Gln	His Asp Ser Lys Asn	Gln Phe Val Ser Leu Gly	
	580	585	590
Ser Met Cys Phe Pro	Glu Ala Val Leu Leu Ser	Asp Glu Arg Asn Ile	
	595	600	605
Leu Ser Asn Val Asp	Asp Ile Leu Ala Ala Thr	Ala Ala Ala Cys Gly	
	610	615	620
Val Thr Pro Thr Asp	Phe Ser Lys Ser Thr Ser	Asn Glu Thr Met Gln	
625	630	635	640
Ala Val Glu Asp Gly	Asp Ser Lys Ser His Phe	Gln Gln Ser Leu Asp	
	645	650	655
Val Arg His Val Thr	Ser Asp Phe Asn Ser Met	Thr Ala Thr Val Gly	
	660	665	670
Lys Pro Gln Asn Ile	Asn Asp Thr Ser Leu Asn	Gly Asn Gln Val Thr	
	675	680	685
Val Asn Leu Ser Pro	Val Pro Ala Leu Gln Ser	Lys Met Thr Leu Asp	
	690	695	700
Gln Gln His Ile Glu	Thr Pro Gly Gln Asn Ile	Pro Thr Lys Val Thr	
705	710	715	720
Ser Ala Val Val Gly	Pro Ser His Glu Val Gln	Glu Gln Ser Ser Gly	
	725	730	735
Pro Phe Lys Lys Gln	Ser Ala Thr Asn Leu Glu	Ser Glu Glu Asp Ser	
	740	745	750
Glu Ala Pro Val Asp	Ser Thr Leu Asn Asn Asn	Arg Asn Gln Glu Phe	
	755	760	765
Val Ser Ser Ser Arg	Ser Ile Ser Gly Glu Ser	Ala Thr Ser Glu Ser	
	770	775	780
Glu Phe Thr Leu Gly	Gly Asp Asp Ser Gly Val	Ser Met Asn Pro Ala	
785	790	795	800
Arg Ser Ala Leu Ala	Leu Leu Ala Met Ala Gln	Ser Gly Asp Ala Val	
	805	810	815
Ser Val Lys Ile Glu	Glu Glu Asn Gln Asp Leu	Met His Phe Asn Leu	

820	825	830	
Gln Lys Lys Arg Ala Lys Gly Lys Gly Gln Val Lys Glu Glu Asp Asn			
835	840	845	
Ser Asn Gln Lys Gln Leu Lys Arg Pro Ala Gln Gly Lys Arg Gln Asn			
850	855	860	
Pro Arg Gly Thr Asp Ile Tyr Leu Pro Tyr Thr Pro Pro Ser Ser Glu			
865	870	875	880
Ser Cys His Asp Gly Tyr Gln His Gln Glu Lys Met Arg Gln Lys Ile			
885	890	895	
Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys Thr Gly Phe Ile Ala			
900	905	910	
Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys Gln Gln Phe Ser Thr			
915	920	925	
Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met			
930	935	940	
Val Arg Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr			
945	950	955	960
Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys			
965	970	975	
Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser			
980	985	990	
Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Ser			
995	1000	1005	
Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Asp Lys Lys Lys Lys Thr			
1010	1015	1020	
Glu Ala Leu Gln Val Ala Thr Thr Ser Pro Thr Ala Asn Thr Thr Gly			
1025	1030	1035	1040
Thr Ala Thr Thr Ser Ser Thr Thr Val Gly Ala Val Lys Gln Glu Pro			
1045	1050	1055	
Leu His Ser Thr Ser Tyr Ala Val Asn Ile Leu Glu Asn Ile Ser Ser			
1060	1065	1070	
Ser Glu Ser Ser Lys Pro Ile Glu Leu Asp Gly Leu Pro Ser Asp Gln			
1075	1080	1085	
Phe Ala Lys Gly Gln Asp Thr Val Ala Ile Glu Gly Phe Thr Asp Glu			
1090	1095	1100	
Glu Asp Thr Glu Ser Gly Gly Glu Gly Gln Tyr Arg Glu Arg Asp Glu			

1105	1110	1115	1120
Phe Val Val Lys Ile Glu Asp Ile Glu Thr Phe Lys Glu Ala Leu Lys			
1125	1130	1135	
Thr Gly Lys Glu Pro Pro Ala Ile Trp Lys Val Gln Lys Ala Leu Leu			
1140	1145	1150	
Gln Lys Phe Val Pro Glu Ile Arg Asp Gly Gln Arg Glu Phe Ala Ala			
1155	1160	1165	
Thr Asn Ser Tyr Leu Gly Tyr Phe Gly Asp Ala Lys Ser Lys Tyr Lys			
1170	1175	1180	
Arg Ile Tyr Val Lys Phe Ile Glu Asn Ala Asn Lys Lys Glu Tyr Val			
1185	1190	1195	1200
Arg Val Cys Ser Lys Lys Pro Arg Asn Lys Pro Ser Gln Thr Ile Arg			
1205	1210	1215	
Thr Val Gln Ala Lys Pro Ser Ser Ser Ser Lys Thr Ser Asp Pro Leu			
1220	1225	1230	
Ala Ser Lys Thr Thr Thr Thr Lys Ala Pro Ser Val Lys Pro Lys Val			
1235	1240	1245	
Lys Gln Pro Lys Val Lys Ala Glu Pro Pro Pro Lys Lys Arg Lys Lys			
1250	1255	1260	
Trp Lys Glu Glu Phe Ser Ser Ser Gln Ser Asp Ser Ser Pro Glu Ile			
1265	1270	1275	1280
His Thr Ser Ser Ser Asp Asp Glu Glu Phe Glu Pro Pro Ala Pro Phe			
1285	1290	1295	
Val Thr Arg Phe Leu Asn Thr Arg Ala Met Lys Glu Thr Phe Lys Ser			
1300	1305	1310	
Tyr Met Glu			
1315			

<210> 3897

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3897

Met Ala Leu Gln Ala Leu Ala Arg Leu Pro Arg Leu Glu Gly Gly Ser

1	5	10	15
Gly Asn Ser Lys Val Gly Phe Ser Ser Gly Trp Ser Ala Phe Leu Pro			
20	25	30	
Arg Arg Leu Gly Ser Gly Ile Ser Gly Phe Phe Cys Arg Ile Glu Thr			
35	40	45	
Cys Pro Trp Ala Leu Thr Leu Asn Thr Gly Arg Ser Ala Ala Cys Cys			
50	55	60	
Leu Ser Val Ala Trp Pro Leu His Pro Pro Ser Pro Ser Pro Cys Tyr			
65	70	75	80
Pro Val Arg Arg Val Arg Gln Ser Leu His Pro Ser Ser Ser Trp Gly			
85	90	95	
Gly Arg Ser Ala Glu Ala Ser Gly Asp Leu Leu Arg Gly Val Cys Leu			
100	105	110	
Ala Arg Asp Val Ser Ile Pro His Arg Gln Gly Arg Cys Leu Pro Arg			
115	120	125	
Ser Pro Trp Gly Ser Ala Gly Val Asn Ala Ala Leu Gln Gly Gly Arg			
130	135	140	
Gly Arg Ala Ser Ser Gly Gly Gly Gly Gly Ala Gln Gly Val Gln Leu			
145	150	155	160
Gly His Lys Leu Thr Ala			
165			

<210> 3898

<211> 803

<212> PRT

<213> Homo sapiens

<400> 3898

Met Pro Trp Val Glu Pro Lys Pro Arg Pro Gly Pro Glu Gln Lys Pro			
1	5	10	15
Lys Leu Thr Lys Pro Asp Ser Ala Thr Gly Pro Gln Trp Tyr Gln Glu			
20	25	30	
Ser Gln Glu Ser Glu Ser Glu Gly Lys Gln Pro Pro Pro Gly Pro Leu			
35	40	45	
Ala Pro Pro Lys Ser Pro Glu Pro Ser Gly Pro Leu Ala Ser Glu Gln			

50	55	60
Asp Ala Pro Leu Pro Glu Gly Asp Asp Ala Pro Pro Arg Pro Ser Met		
65	70	75
Leu Asp Asp Ala Pro Arg Leu Pro Leu Glu Leu Asp Asp Ala Pro Leu		
85	90	95
Pro Glu Glu Glu Thr Pro Glu Pro Thr Ala Ile Cys Arg His Arg His		
100	105	110
Arg Cys His Thr Asp Cys Leu Glu Gly Leu Leu Ser Arg Thr Phe Gln		
115	120	125
Trp Leu Gly Trp Gln Val Gly Ala His Pro Trp Ile Phe Leu Leu Ala		
130	135	140
Pro Leu Met Leu Thr Ala Ala Leu Gly Thr Gly Phe Leu Tyr Leu Pro		
145	150	155
Lys Asp Glu Glu Glu Asp Leu Glu Glu His Tyr Thr Pro Val Gly Ser		
165	170	175
Pro Ala Lys Ala Glu Arg Arg Phe Val Gln Gly His Phe Thr Thr Asn		
180	185	190
Asp Ser Tyr Arg Phe Ser Ala Ser Arg Arg Ser Thr Glu Ala Asn Phe		
195	200	205
Val Ser Leu Leu Val Val Ser Tyr Ser Asp Ser Leu Leu Asp Pro Ala		
210	215	220
Thr Phe Ala Glu Val Ser Lys Leu Asp Gly Ala Val Gln Asp Leu Arg		
225	230	235
Val Ala Arg Glu Lys Gly Ser Gln Ile Gln Tyr Gln Gln Val Cys Ala		
245	250	255
Arg Tyr Arg Ala Leu Cys Val Pro Pro Asn Pro Ile Leu Tyr Ala Trp		
260	265	270
Gln Val Asn Lys Thr Leu Asn Leu Ser Ser Ile Ser Phe Pro Ala Tyr		
275	280	285
Asn His Gly Arg His Pro Leu Tyr Leu Thr Gly Phe Phe Gly Gly Tyr		
290	295	300
Ile Leu Gly Gly Ser Leu Gly Met Gly Gln Leu Leu Leu Arg Ala Lys		
305	310	315
Ala Met Arg Leu Leu Tyr Tyr Leu Lys Thr Glu Asp Pro Glu Tyr Asp		
325	330	335
Val Gln Ser Lys Gln Trp Leu Thr His Leu Leu Asp Gln Phe Thr Asn		

340	345	350	
Ile Lys Asn Ile Leu Ala Leu Lys Lys Ile Glu Val Val His Phe Thr			
355	360	365	
Ser Leu Ser Arg Gln Leu Glu Phe Glu Ala Thr Ser Val Thr Val Ile			
370	375	380	
Pro Val Phe His Leu Ala Tyr Ile Leu Ile Ile Leu Phe Ala Val Thr			
385	390	395	400
Ser Cys Phe Gly Phe Asp Cys Ile Arg Asn Lys Met Cys Val Ala Ala			
405	410	415	
Phe Gly Val Ile Ser Ala Phe Leu Ala Val Val Ser Gly Phe Gly Leu			
420	425	430	
Leu Leu His Ile Gly Val Pro Phe Val Ile Ile Val Ala Asn Ser Pro			
435	440	445	
Phe Leu Ile Leu Gly Val Gly Val Asp Asp Met Phe Ile Met Ile Ser			
450	455	460	
Ala Trp His Lys Thr Asn Leu Ala Gly Asp Ile Arg Glu Arg Met Ser			
465	470	475	480
Asn Val Tyr Ser Lys Ala Ala Val Ser Ile Thr Ile Thr Thr Ile Thr			
485	490	495	
Asn Ile Leu Ala Leu Tyr Thr Gly Ile Met Ser Ser Phe Arg Ser Val			
500	505	510	
Gln Cys Phe Cys Ile Tyr Thr Gly Thr Thr Leu Leu Phe Cys Tyr Phe			
515	520	525	
Tyr Asn Ile Thr Cys Phe Gly Ala Phe Met Ala Leu Asp Gly Lys Arg			
530	535	540	
Glu Val Val Cys Leu Cys Trp Leu Lys Lys Ala Asp Pro Lys Trp Pro			
545	550	555	560
Ser Phe Lys Lys Phe Cys Cys Phe Pro Phe Gly Ser Val Pro Asp Glu			
565	570	575	
His Gly Thr Asp Ile His Pro Met Ser Leu Phe Phe Arg Asp Tyr Phe			
580	585	590	
Gly Pro Phe Leu Thr Arg Ser Glu Ser Lys Tyr Phe Val Val Phe Ile			
595	600	605	
Tyr Val Leu Tyr Ile Ile Ser Ser Ile Tyr Gly Cys Phe His Val Gln			
610	615	620	
Glu Gly Leu Asp Leu Arg Asn Leu Ala Ser Asp Asp Ser Tyr Ile Thr			

625 630 635 640
 Pro Tyr Phe Asn Val Glu Glu Asn Tyr Phe Ser Asp Tyr Gly Pro Arg
 645 650 655
 Val Met Val Ile Val Thr Lys Lys Val Asp Tyr Trp Asp Lys Asp Val
 660 665 670
 Arg Gln Lys Leu Glu Asn Cys Thr Lys Ile Phe Glu Lys Asn Val Tyr
 675 680 685
 Val Asp Lys Asn Leu Thr Glu Phe Trp Leu Asp Ala Tyr Val Gln Tyr
 690 695 700
 Leu Lys Gly Asn Ser Gln Asp Pro Asn Glu Lys Asn Thr Phe Met Asn
 705 710 715 720
 Asn Ile Pro Asp Phe Leu Ser Asn Phe Pro Asn Phe Gln His Asp Ile
 725 730 735

 Asn Ile Ser Ser Ser Asn Glu Ile Ile Ser Ser Arg Gly Phe Ile Gln
 740 745 750
 Thr Thr Asp Val Ser Ser Ser Ala Lys Lys Lys Ile Leu Leu Phe Gln
 755 760 765
 Leu Arg Arg Ile Ala Glu Asp Cys Gln Ile Pro Leu Met Val Tyr Asn
 770 775 780
 Gln Ala Phe Ile Tyr Phe Asp Gln Tyr Ala Ala Ile Leu Glu Asp Thr
 785 790 795 800
 Val Arg Asn

<210> 3899

<211> 520

<212> PRT

<213> Homo sapiens

<400> 3899

Met Glu Phe His Asn Gly Gly His Val Ser Gly Ile Gly Gly Phe Leu
 1 5 10 15
 Val Ser Leu Thr Ser Arg Met Lys Pro His Thr Leu Ala Val Thr Pro
 20 25 30

Ala Leu Ile Phe Ala Ile Thr Val Ala Thr Ile Gly Ser Phe Gln Phe
 35 40 45
 Gly Tyr Asn Thr Gly Val Ile Asn Ala Pro Glu Thr Ile Ile Lys Glu
 50 55 60
 Phe Ile Asn Lys Thr Leu Thr Asp Lys Ala Asn Ala Pro Pro Ser Glu
 65 70 75 80
 Val Leu Leu Thr Asn Leu Trp Ser Leu Ser Val Ala Ile Phe Ser Val
 85 90 95
 Gly Gly Met Ile Gly Ser Phe Ser Val Gly Leu Phe Val Asn Arg Phe
 100 105 110
 Gly Arg Arg Asn Ser Met Leu Ile Val Asn Leu Leu Ala Ala Thr Gly
 115 120 125
 Gly Cys Leu Met Gly Leu Cys Lys Ile Ala Glu Ser Val Glu Met Leu
 130 135 140
 Ile Leu Gly Arg Leu Val Ile Gly Leu Phe Cys Gly Leu Cys Thr Gly
 145 150 155 160
 Phe Val Pro Met Tyr Ile Gly Glu Ile Ser Pro Thr Ala Leu Arg Gly
 165 170 175

 Ala Phe Gly Thr Leu Asn Gln Leu Gly Ile Val Ile Gly Ile Leu Val
 180 185 190
 Ala Gln Ile Phe Gly Leu Glu Leu Ile Leu Gly Ser Glu Glu Leu Trp
 195 200 205
 Pro Val Leu Leu Gly Phe Thr Ile Leu Pro Ala Ile Leu Gln Ser Ala
 210 215 220
 Ala Leu Pro Cys Cys Pro Glu Ser Pro Arg Phe Leu Leu Ile Asn Arg
 225 230 235 240
 Lys Lys Glu Glu Asn Ala Thr Arg Ile Leu Gln Arg Leu Trp Gly Thr
 245 250 255
 Gln Asp Val Ser Gln Asp Ile Gln Glu Met Lys Asp Glu Ser Ala Arg
 260 265 270
 Met Ser Gln Glu Lys Gln Val Thr Val Leu Glu Leu Phe Arg Val Ser
 275 280 285
 Ser Tyr Arg Gln Pro Ile Ile Ile Ser Ile Val Leu Gln Leu Ser Gln
 290 295 300
 Gln Leu Ser Gly Ile Asn Ala Val Phe Tyr Tyr Ser Thr Gly Ile Phe

305 310 315 320
 Lys Asp Ala Gly Val Gln Gln Pro Ile Tyr Ala Thr Ile Ser Ala Gly
 325 330 335
 Val Val Asn Thr Ile Phe Thr Leu Leu Ser Leu Phe Leu Val Glu Arg
 340 345 350
 Ala Gly Arg Arg Thr Leu His Met Ile Gly Leu Gly Gly Met Ala Phe
 355 360 365
 Cys Ser Thr Leu Met Thr Val Ser Leu Leu Leu Lys Asn His Tyr Asn
 370 375 380
 Gly Met Ser Phe Val Cys Ile Gly Ala Ile Leu Val Phe Val Ala Cys
 385 390 395 400
 Phe Glu Ile Gly Pro Gly Pro Ile Pro Trp Phe Ile Val Ala Glu Leu
 405 410 415
 Phe Ser Gln Gly Pro Arg Pro Ala Ala Met Ala Val Ala Gly Cys Ser
 420 425 430
 Asn Trp Thr Ser Asn Phe Leu Val Gly Leu Leu Phe Pro Ser Ala Ala
 435 440 445
 Tyr Tyr Leu Gly Ala Tyr Val Phe Ile Ile Phe Thr Gly Phe Leu Ile
 450 455 460
 Thr Phe Leu Ala Phe Thr Phe Phe Lys Val Pro Glu Thr Arg Gly Arg
 465 470 475 480
 Thr Phe Glu Asp Ile Thr Arg Ala Phe Glu Gly Gln Ala His Gly Ala
 485 490 495
 Asp Arg Ser Gly Lys Asp Gly Val Met Gly Met Asn Ser Ile Glu Pro
 500 505 510
 Ala Lys Glu Thr Thr Thr Asn Val
 515 520

<210> 3900

<211> 213

<212> PRT

<213> Homo sapiens

<400> 3900

Met Gly Arg Cys Ser Trp His Pro Glu Cys Val Ser Gly Gln Ala Leu

1	5	10	15												
Val	Lys	Glu	Ala	Leu	Ala	Gly	Thr	Arg	Asp	Met	Thr	Ser	Thr	Leu	Arg
	20							25						30	
Phe	His	Pro	Gln	Ser	Thr	Gln	Met	Arg	Arg	Val	Ser	Pro	Gly	Ala	Pro
	35							40						45	
Pro	Cys	Pro	Thr	Pro	Thr	Leu	Gly	Gly	Ile	Leu	Ser	Arg	Glu	Met	Gly
	50							55						60	
Pro	Pro	Ser	Pro	Arg	Arg	Pro	Arg	Ala	Val	Ala	Val	Arg	Val	Arg	Lys
65						70						75			80
Ala	Thr	Thr	Cys	Ala	Val	Phe	Val	Val	Thr	Glu	Thr	Trp	Glu	Ser	Leu
				85						90					95
Thr	Gly	Ser	Pro	Thr	Glu	Ala	Gly	Ala	Gly	Leu	Gly	Ser	Glu	Ala	Pro
			100							105					110
Gly	Glu	Pro	Arg	Ala	Ala	Gly	Phe	Cys	Thr	His	Leu	Leu	His	Leu	Pro
		115								120					125
Thr	His	Thr	Trp	Lys	Lys	Ser	Gln	Ala	His	Leu	Glu	Ala	Ala	Gln	Leu
		130								135					140
Leu	Ser	Ser	Cys	Pro	Pro	Ile	Pro	Gly	Phe	Ser	Ser	Gln	Leu	His	Pro
145						150						155			160
Gly	Pro	Gly	Thr	Pro	Cys	Asn	Leu	Gly	Ser	Pro	Ala	Pro	Leu	Arg	Gly
						165								170	
Leu	Pro	Val	Thr	Trp	Ser	Gln	Leu	Pro	Pro	Arg	Gly	Ala	Asp	Leu	Thr
						180								185	
Ser	Thr	Thr	Cys	Gln	Trp	His	Val	Pro	Gly	Glu	Gln	Glu	Leu	Gly	Leu
			195											200	
Gln	Gly	Pro	Cys	Leu											
															210

<210> 3901

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3901

Met Ala Val Tyr Asn Met Val Pro Arg Arg Val Gly Ile Gln Arg Lys

1 5 10 15
 Trp Glu Leu Ser Ser Glu Cys Ala Pro Asn Leu Arg Ser Asp Thr Pro
 20 25 30
 Ser Phe Leu Leu Tyr Phe Thr Gly Tyr Thr Asp Gln Cys Leu Tyr Asn
 35 40 45
 Val Gly Gly Asn Ser Ile Thr Val Asn Ile Ile Arg Gln Gly Ser Leu
 50 55 60
 Gly Thr Val Leu Glu Thr Asp Ser His Ser Pro Lys Pro Phe Arg Tyr
 65 70 75 80
 Ala Leu Ile Tyr Glu Phe Thr Ile Ile Phe Lys Thr Asn Ser Trp Ala
 85 90 95
 Arg Trp Pro Ala Pro Ile Val Pro Ala Ile Gln Glu Val Glu Glu Gly
 100 105 110
 Gly Phe Phe Glu Pro Arg Gly Leu Gly Leu
 115 120

<210> 3902

<211> 449

<212> PRT

<213> Homo sapiens

<400> 3902

Met Ile Val Thr Gln Pro Lys Gly Ile Gly Ser Thr Val Gln Pro Ala
 1 5 10 15
 Ala Lys Ile Ile Pro Thr Lys Ile Val Tyr Gly Gln Gln Gly Lys Thr
 20 25 30
 Gln Val Leu Ile Lys Pro Lys Pro Val Thr Phe Gln Ala Thr Val Val
 35 40 45
 Ser Glu Gln Thr Arg Gln Leu Val Thr Glu Thr Leu Gln Gln Ala Ser
 50 55 60
 Arg Val Ala Glu Ala Gly Asn Ser Ser Ile Gln Glu Gly Lys Glu Glu
 65 70 75 80
 Pro Gln Asn Tyr Thr Asp Ser Ser Ser Ser Ser Thr Glu Ser Ser Gln
 85 90 95
 Ser Ser Gln Asp Ser Gln Pro Val Val His Val Ile Ala Ser Arg Arg

100	105	110
Gln Asp Trp Ser Glu His Glu Ile Ala Met Glu Thr Ser Pro Thr Ile		
115	120	125
Ile Tyr Gln Asp Val Ser Ser Glu Ser Gln Ser Ala Thr Ser Thr Ile		
130	135	140
Lys Ala Leu Leu Glu Leu Gln Gln Thr Thr Val Lys Glu Lys Leu Glu		
145	150	155
Ser Lys Pro Arg Gln Pro Thr Ile Asp Leu Ser Gln Met Ala Val Pro		
165	170	175
Ile Gln Met Thr Gln Glu Lys Arg His Ser Pro Glu Ser Pro Ser Ile		
180	185	190
Ala Val Val Glu Ser Glu Leu Val Ala Glu Tyr Ile Thr Thr Val Ser		
195	200	205
His Arg Ser Gln Pro Gln Gln Pro Ser Gln Pro Gln Arg Thr Leu Leu		
210	215	220
Gln His Val Ala Gln Ser Gln Thr Ala Thr Gln Thr Ser Val Val Val		
225	230	235
Lys Ser Ile Pro Ala Ser Ser Pro Gly Ala Ile Thr His Ile Met Gln		
245	250	255
Gln Ala Leu Ser Ser His Thr Ala Phe Thr Lys His Ser Glu Glu Leu		
260	265	270
Gly Thr Glu Glu Gly Glu Val Glu Glu Met Asp Thr Leu Asp Pro Gln		
275	280	285
Thr Gly Leu Phe Tyr Arg Ser Ala Leu Thr Gln Ser Gln Ser Ala Lys		
290	295	300
Gln Gln Lys Leu Ser Gln Pro Pro Leu Glu Gln Thr Gln Leu Gln Val		
305	310	315
Lys Thr Leu Gln Cys Phe Gln Thr Lys Gln Lys Gln Thr Ile His Leu		
325	330	335
Gln Ala Asp Gln Leu Gln His Lys Leu Pro Gln Met Pro Gln Leu Ser		
340	345	350
Ile Arg His Gln Lys Leu Thr Pro Leu Gln Gln Glu Gln Ala Gln Pro		
355	360	365
Lys Pro Asp Val Gln His Thr Gln His Pro Met Val Ala Glu Asp Arg		
370	375	380
Gln Leu Pro Thr Leu Met Ala Gln Pro Pro Gln Thr Val Val Gln Val		

385 390 395 400
 Leu Ala Val Lys Thr Thr Gln Gln Leu Pro Lys Leu Gln Gln Ala Pro
 405 410 415
 Asn Gln Pro Lys Ile Tyr Val Gln Pro Gln Thr Pro Gln Ser Gln Met
 420 425 430
 Ser Leu Pro Ala Ser Ser Glu Lys Gln Thr Ala Ser Gln Val Thr Glu
 435 440 445
 Tyr

<210> 3903

<211> 968

<212> PRT

<213> Homo sapiens

<400> 3903

Met Arg Cys Pro Gly Pro Arg Leu Leu Glu Thr Ser Trp Arg His Pro
 1 5 10 15
 Pro Ala Pro Phe Thr Ser Thr Asn Arg His Leu Tyr Asp Phe Thr Gly
 20 25 30
 Asn Leu Asn Leu Asp Gly Lys Ser Leu Val Ala Leu Gly Pro Asp Gln
 35 40 45
 Ile Leu Leu Arg Gly Thr Gln Leu Arg Asn Thr Gln Trp Val Phe Gly
 50 55 60
 Ile Val Val Tyr Thr Gly His Asp Thr Lys Leu Met Gln Asn Ser Thr
 65 70 75 80
 Lys Ala Pro Leu Lys Arg Ser Asn Val Glu Lys Val Thr Asn Val Gln
 85 90 95
 Ile Leu Val Leu Phe Gly Ile Leu Leu Val Met Ala Leu Val Ser Ser
 100 105 110
 Ala Gly Ala Leu Tyr Trp Asn Arg Ser His Gly Glu Lys Asn Trp Tyr
 115 120 125
 Ile Lys Lys Met Asp Thr Thr Ser Asp Asn Phe Gly Tyr Asn Leu Leu
 130 135 140
 Thr Phe Ile Ile Leu Tyr Asn Asn Leu Ile Pro Ile Ser Leu Leu Val

145	150	155	160
Thr Leu Glu Val Val Lys Tyr Thr Gln Ala Leu Phe Ile Asn Trp Asp			
165	170	175	
Thr Asp Met Tyr Tyr Ile Gly Asn Asp Thr Pro Ala Met Ala Arg Thr			
180	185	190	
Ser Asn Leu Asn Glu Glu Leu Gly Gln Val Lys Tyr Leu Phe Ser Asp			
195	200	205	
Lys Thr Gly Thr Leu Thr Cys Asn Ile Met Asn Phe Lys Lys Cys Ser			
210	215	220	
Ile Ala Gly Val Thr Tyr Gly His Phe Pro Glu Leu Ala Arg Glu Pro			
225	230	235	240
Ser Ser Asp Asp Phe Cys Arg Met Pro Pro Pro Cys Ser Asp Ser Cys			
245	250	255	
Asp Phe Asp Asp Pro Arg Leu Leu Lys Asn Ile Glu Asp Arg His Pro			
260	265	270	
Thr Ala Pro Cys Ile Gln Glu Phe Leu Thr Leu Leu Ala Val Cys His			
275	280	285	
Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln Ala Ser			
290	295	300	
Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu Gly Phe			
305	310	315	320
Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala Met Gly			
325	330	335	
Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser Ser Asp			
340	345	350	
Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg Leu Arg			
355	360	365	
Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu Ser Lys			
370	375	380	
Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr Phe Ala			
385	390	395	400
Thr Glu Gly Phe Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu Ser Glu			
405	410	415	
Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala Ser Thr Ile			
420	425	430	
Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu Ile Ile Glu			

435	440	445
Lys Asn Leu Leu Leu Leu Gly	Ala Thr Ala Ile Glu Asp Arg Leu Gln	
450	455	460
Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala Glu Ile Lys		
465	470	475
Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile Asn Ile Gly		
485	490	495
Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile Leu Leu Lys		
500	505	510
Glu Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln His Cys Thr		
515	520	525
Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala Leu Ile Ile		
530	535	540
Asp Gly His Thr Leu Lys Tyr Ala Leu Ser Phe Glu Val Arg Arg Ser		
545	550	555
Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys Cys Arg Val		
565	570	575
Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys Lys Arg Val		
580	585	590
Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp Val Gly Met		
595	600	605
Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn Glu Gly Met		
610	615	620
Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe Ser Tyr Leu		
625	630	635
Glu Lys Leu Leu Leu Val His Gly Ala Trp Ser Tyr Asn Arg Val Thr		
645	650	655
Lys Cys Ile Leu Tyr Cys Phe Tyr Lys Asn Val Val Leu Tyr Ile Ile		
660	665	670
Glu Leu Trp Phe Ala Phe Val Asn Gly Phe Ser Gly Gln Ile Leu Phe		
675	680	685
Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr Ala Leu Pro		
690	695	700
Pro Phe Thr Leu Gly Ile Phe Glu Arg Ser Cys Thr Gln Glu Ser Met		
705	710	715
Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr Gln Asn Gly Glu Gly Phe		

	725		730		735
Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu Val His Ser					
	740		745		750
Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His Asp Thr Val					
	755		760		765
Leu Thr Ser Gly His Ala Thr Asp Tyr Leu Phe Val Gly Asn Ile Val					
	770		775		780
Tyr Thr Tyr Val Val Val Thr Val Cys Leu Lys Ala Gly Leu Glu Thr					
785		790		795	800
Thr Ala Trp Thr Lys Phe Ser His Leu Ala Val Trp Gly Ser Met Leu					
	805		810		815
Thr Trp Leu Val Phe Phe Gly Ile Tyr Ser Thr Ile Trp Pro Thr Ile					
	820		825		830
Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val Leu Ser Ser					
	835		840		845
Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala Cys Leu Ile					
	850		855		860
Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys Lys Thr Leu					
865		870		875	880
Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val Leu Gly Lys					
	885		890		895
Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu Arg Asp Arg					
	900		905		910
Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu Phe Arg Gly					
	915		920		925
Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe Ser Gln Glu					
	930		935		940
Glu His Gly Ala Val Ser Gln Glu Glu Val Ile Arg Ala Tyr Asp Thr					
945		950		955	960
Thr Lys Lys Lys Ser Arg Lys Lys					
	965				

<210> 3904

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3904

Met Ile Pro Cys Gly Met Arg Phe Ile Gly Leu Ala Thr Val Leu Leu
 1 5 10 15
 Lys Pro Leu Leu Lys Gln Pro Ser Glu Val Leu Phe Val Lys Asp Leu
 20 25 30
 Thr Leu Leu Asn His Ser Met Lys Pro Thr Asp Cys Thr Val Thr Leu
 35 40 45
 Gln Val Ala His Met Ser Asn Gln Asp Ile Glu Lys Thr Gly Ala Glu
 50 55 60
 Asp His Leu Gly Ile Thr Ala Arg Glu Ala Ala Ser Gln Lys Leu Met
 65 70 75 80
 Val Pro Gly Ser Thr Ala His Arg Ala Leu Ser Ser Lys Pro Gln His
 85 90 95
 Phe Gln Val Arg Val Lys Val Phe Glu Ala Arg Gln Leu Met Gly Asn
 100 105 110
 Asn Ile Lys Pro Val Val Lys Val Ser Ile Ala Gly Gln Gln His Gln
 115 120 125
 Thr Arg Ile Lys Met Gly Asn Asn Pro Phe Phe Asn Glu Val Gly
 130 135 140

<210> 3905

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3905

Met Arg Val Gly Thr Trp Ile Cys Leu Pro Gly Arg Pro Gly Arg Cys
 1 5 10 15
 Arg Lys Gln His Asp Leu Gly Asn Cys Pro Glu Val Pro Gly Ile Phe
 20 25 30
 Lys Thr Leu Ala Leu Ser Pro Gly Ala Pro Asp Met Met Gln Gln Pro
 35 40 45

Arg Val Glu Thr Asp Thr Ile Gly Ala Gly Glu Gly Pro Gln Gln Ala
 50 55 60
 Val Pro Trp Ser Ala Trp Val Thr Arg His Gly Trp Val Arg Trp Trp
 65 70 75 80
 Val Ser His Met Pro Pro Ser Trp Ile Gln Trp Trp Ser Thr Ser Asn
 85 90 95
 Trp Arg Gln Pro Leu Gln Arg Leu Leu Trp Gly Leu Glu Gly Ile Leu
 100 105 110
 Tyr Leu Leu Leu Ala Leu Met Leu Cys His Ala Leu Phe Thr Thr Gly
 115 120 125
 Ser His Leu Leu Ser Ser Leu Trp Pro Val Val Ala Ala Val Trp Arg
 130 135 140
 His Leu Leu Pro Ala Leu Leu Leu Leu Val Leu Ser Ala Leu Pro Ala
 145 150 155 160
 Leu Leu Phe Thr Ala Ser Phe Leu Leu Leu Phe Ser Thr Leu Leu Ser
 165 170 175
 Leu Val Gly Leu Leu Thr Ser Met Thr His Pro Gly Asp Thr Gln Asp
 180 185 190
 Leu Asp Gln
 195

<210> 3906

<211> 1116

<212> PRT

<213> Homo sapiens

<400> 3906

Met Glu Ser Pro Leu Ile Tyr Val Ser Val Leu Leu Leu Asn Ile Phe
 1 5 10 15
 Glu Phe Ser Ser Gly Ile Val Tyr Asn Lys Asp Asp Thr Glu Lys Arg
 20 25 30
 Phe Ala Cys Ser Asn Lys Gly Phe Pro Gln Glu Asn Glu Ile Ile Lys
 35 40 45
 Leu Tyr Leu Phe Leu Glu Asn Leu Lys Ile Gln Cys Phe Phe Gln Thr
 50 55 60

Glu Asn Glu Ile Ala Ser Lys Ala Met Leu Ser Val Phe Thr Ser Gly
 65 70 75 80
 Gly Leu Ala Pro Ser Leu Gly Ile Met Asn Ser Thr Tyr Asn Gly Ile
 85 90 95
 Phe His Phe Asn Leu Thr Leu Phe Ser Asp Arg Ile Leu Trp Leu Val
 100 105 110
 Asp Ile Pro Arg Glu Asn Ile Thr Gln Ser Thr Asp Ile Ala Ala Val
 115 120 125
 Glu Glu Trp Leu Val Arg Ile Thr Leu His His Gly Leu Asn Ile Tyr
 130 135 140
 Ala Thr Glu Gly Thr Leu Leu Asp Val Ile Arg Glu Pro Ile Leu Gln
 145 150 155 160
 Trp Thr Pro Gly Asp Val Ile Pro Glu Ser Glu Ile Ser Lys Leu Tyr
 165 170 175
 Pro His Val Val Asp Leu Lys Val Thr Lys Cys Pro Cys Ala Asn Asp
 180 185 190
 Val Ala Leu Leu Gly Phe Ile Val Asp Thr Ile Val Asp Gly Val Tyr
 195 200 205
 Ile Gly Ile Thr Phe Gly Gly Phe Trp His Asp Tyr Asp Thr Thr Trp
 210 215 220
 Phe Asn Met Thr Gln Thr Ile Tyr Ser Gln Leu Gln Glu Glu Tyr Glu
 225 230 235 240
 Asp Leu Ser Leu Val Asp Met Val Leu Thr Asn His Phe Leu Val Ile
 245 250 255
 Leu Thr Ser Leu Gly Leu Phe Val Ser Glu Asp Leu Arg Tyr Pro Ser
 260 265 270
 Arg His Ser Leu Ser Phe Ser Arg Ala Asp Phe Cys Gly Phe Glu Arg
 275 280 285
 Val Asp Tyr Val Lys Gly Lys Leu Trp Tyr Asn Glu Arg Cys Phe Ala
 290 295 300
 Asn Arg Glu His Phe Glu Val Asp Tyr Val Thr Val Thr Phe Glu Arg
 305 310 315 320
 Asn Arg Thr Leu Ser Glu Ser Ser Ser Cys Phe Tyr Ser Gln Glu Pro
 325 330 335
 Phe Leu Glu Trp Val Pro Cys Leu Pro His Ile Phe Lys Gly Ile Lys
 340 345 350

Ile Phe Pro Thr Val Leu Thr Phe Leu Val Asp Gln Glu Arg Gly Thr
 355 360 365
 Gly Val Tyr Leu Phe Tyr Asn Lys Val Arg Lys Thr Ala Ile Ala Ser
 370 375 380
 Val Ser Thr Leu Arg Asn Asn Glu Pro Asn Ser Gln Ser Lys Phe Pro
 385 390 395 400
 Ile Phe Arg Phe Pro Ser Ser Phe Ser Ser Pro Val Gly Met Val Phe
 405 410 415
 His Pro Arg Ser His Phe Leu Tyr Ala Tyr Gly Asn Gln Ile Trp Leu
 420 425 430
 Ser Val Asp Gly Gly Asn Thr Phe Gln Leu Ile Ala Asn Phe His Asp
 435 440 445
 Asp Ile Ile Lys Lys Thr Phe His Ser Phe Tyr Thr Ser Ala Ile Thr
 450 455 460
 Phe Val Ser Gln Arg Gly Lys Val Tyr Ser Thr Lys Ala Gly Met Gly
 465 470 475 480
 Arg Tyr Ser Ala Val Gly Ser Val Thr Glu Arg Ile Phe Thr Leu Tyr
 485 490 495
 Tyr Asp His Leu Gly Phe Leu His Lys Leu Thr Leu Gly Arg Phe Glu
 500 505 510
 Ala Ser Gly Pro Pro Thr Ala Phe Gly Asn Ser Arg Asn Leu Phe Gly
 515 520 525
 Gln Pro Pro Asp Met Gly Phe Glu Thr Ala Leu Ala Pro Gln His Thr
 530 535 540
 Ser Leu Asp Glu Ile Ile Phe Phe Ala Tyr Val Pro Glu Asn Glu Pro
 545 550 555 560
 Gln Glu Thr Ile Tyr Ser Lys Lys Phe Gly Asn Ile His Tyr Gly Lys
 565 570 575
 Val Ile His Ser Gly Lys Thr Gly Arg Ala Tyr Ile Arg Lys Val Leu
 580 585 590
 Gln His Thr Thr Pro Lys Gly Phe Leu Ser Ser Val Ile Ala Glu Met
 595 600 605
 Lys Glu Pro Phe Gly Leu Glu Glu Val Asn Glu Ser Ser Cys Leu Ser
 610 615 620
 Ser Ser Leu Leu Ile Asn Lys Ala Gly Asn Val Tyr Lys Leu Thr Leu
 625 630 635 640

Asp Ser Gln Val Val Gln Ala Leu Phe Glu Asp Thr Asp Ile Glu Lys			
645	650	655	
Thr Val Val Leu Pro Gly Tyr Ser Ser Phe Leu Ile Thr Ser Ile Leu			
660	665	670	
Asp Asn Lys Asn Ala Leu Ala Ile Ala Thr Met Pro Glu Ser Ala Pro			
675	680	685	
Asn Asn Met Thr Phe Leu Lys Ser Thr Trp Phe Leu Tyr Asn Phe Gly			
690	695	700	
Gln Arg Asn Gly Arg Thr Trp Lys Ile Tyr Ser Lys Pro Cys Asn Tyr			
705	710	715	720
Trp Phe Gln His Asp Asp Ser Pro Ser Leu Asn Ile Val Lys Tyr Ile			
725	730	735	
Asp Leu Gly Asn Ser Tyr Val Leu Lys Ala Lys Val Ile Arg Asn Ala			
740	745	750	
Lys Gly Phe Arg Met Leu Glu Ile Pro Leu Leu Thr Val Phe Val Gly			
755	760	765	
Asn Pro Asn Leu Leu Glu Val Thr Ala Glu Val Thr Phe Asp Asp Thr			
770	775	780	
Asp Ser Tyr Val Ile Thr Ile Ser Ala Ala Ser Lys Val Leu His Gln			
785	790	795	800
Gly Ser Thr Ser Leu Ala Phe Ile Met Trp Ser Ala Ser Thr Glu Cys			
805	810	815	
Phe Val Thr Thr Met Val Pro Thr Leu Lys Ser Ser Cys Ser Tyr Leu			
820	825	830	
Arg Ser Met His His Ile Pro Ser Lys Phe Ile Pro Phe Glu Asp Trp			
835	840	845	
Ile Ser Gly Val His Lys Asp Ser Gln Gly Phe Asn Leu Ile Lys Thr			
850	855	860	
Leu Pro Ile Asn Tyr Arg Pro Pro Ser Asn Met Gly Ile Ala Ile Pro			
865	870	875	880
Leu Thr Asp Asn Phe Tyr His Ala Asp Pro Ser Lys Pro Ile Pro Arg			
885	890	895	
Asn Met Phe His Met Ser Lys Lys Thr Gly Lys Phe Lys Gln Cys Ala			
900	905	910	
Asn Val Ser Thr Arg Glu Glu Cys Asn Cys Thr Lys Asp Gln Lys Phe			
915	920	925	

Ser His Ala Val Ala Phe Ser Asp Cys Arg Glu Lys Val Pro Arg Phe
 930 935 940
 Lys Phe Pro Ile Thr Gln Tyr Pro Val Ser Leu Glu Ile Ile Asn Glu
 945 950 955 960
 Asp Gly Arg Val Pro Leu Gln Ser Pro Tyr Leu Val Thr Val Thr Glu
 965 970 975
 Val Asn Met Arg His Asn Trp Lys Leu Lys His Thr Val Pro Glu Asn
 980 985 990
 Ile Lys Arg Met Lys Gln Leu Val Glu Pro Ile Leu Gly Ala Ala Val
 995 1000 1005
 Tyr Asn Pro Ser Gly Leu Asn Leu Ser Ile Lys Gly Ser Glu Leu Phe
 1010 1015 1020
 His Phe Arg Val Thr Val Ile Ser Gly Val Thr Phe Cys Asn Leu Ile
 1025 1030 1035 1040
 Glu Glu Phe Gln Ile Tyr Val Asp Gly Ala Pro Leu Pro Phe Pro Gly
 1045 1050 1055
 His Thr Leu Ile Ala Val Ala Thr Ala Val Val Leu Gly Gly Leu Ile
 1060 1065 1070
 Phe Ile Ala Phe Met Phe Gln Leu Gln Gly Ile His Pro Trp Arg Thr
 1075 1080 1085
 Phe Gln Arg Trp Ile Arg Arg Asn Gln Glu Lys Phe Ser Ser Ile Ser
 1090 1095 1100
 Leu Ser Glu Leu Ile His Arg Ser Lys Ser Glu Glu
 1105 1110 1115

<210> 3907

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3907

Met Arg His Arg Glu Gly Ser Trp Glu Pro Trp Ser Arg Pro Val Gly
 1 5 10 15
 Glu Pro Pro Glu Ala Gly Trp Asp Tyr Thr Gln Trp Lys Gln Glu Arg
 20 25 30

Ala Gly Arg Cys

<210> 3908

<211> 1012

<212> PRT

<213> Homo sapiens

<400> 3908

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Met Met Arg Lys Pro Ser Ser Asp Lys Ile Pro Ser Ile Asp Lys Thr
  1             5             10             15
Leu Val Asn Lys Val Val His Ser Ser Val Cys Asn Ile Leu Asn Asp
      20             25             30
Tyr Gly Ser Gln Asp Ser Ile Trp Lys Asn Ile Asn Ser Asn Gly Glu
      35             40             45
Asn Leu Ala Arg Arg Leu Thr Ser Ala Val Ile Asn Glu Ile Phe Gln
      50             55             60
His Gln Val Asn Leu Ile Phe Cys Asp Glu Val Ser Val Ser Ala Cys
      65             70             75             80
Leu Pro Leu Glu Ser Lys Asp Val Val Lys Lys Val Gln Lys Leu Ala
      85             90             95
Gln Thr Ala Ser Lys Glu Cys Gln Thr Ser Ser Pro Tyr Thr Ile Ile
      100            105            110
Leu Pro His Lys Phe Leu Glu Asn Val Ile Ser Ala Leu Phe Ser Lys
      115            120            125
Ile Phe Ser Thr Ile Ser Ser Thr Lys Thr Lys Glu Pro Glu Asp Asn
      130            135            140
Leu Ser Thr Glu Leu Asn Phe Leu Gln Met Lys Leu Val Ser Ala Val
      145            150            155            160
Ala Thr Glu Ile Ser Gln Asp Lys Tyr Met Thr Ile Gln Tyr Val Glu
      165            170            175
Thr Leu Gln Ser Asp Asp Asp Glu Ile Ile Gln Leu Val Val Gln Ser
      180            185            190
Val Tyr Asn Asn Leu Leu Pro Gln Phe Gly Ser Gln Glu Ile Ile Gln
      195            200            205

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Asn Cys Val Thr Ser Gly Cys Lys Ile Leu Ser Glu Asn Ile Val Asp
 210 215 220
 Leu Val Leu Arg Glu Val Ala Ser Asn Gln Leu Gln Ser Tyr Phe Cys
 225 230 235 240
 Gly Glu Leu Thr Pro His Gln Cys Val Glu Val Glu Asn Ile Val Glu
 245 250 255
 Lys Ile Leu Lys Asp Val Phe Gln Thr Thr Asp Val Pro Gln Pro Lys
 260 265 270
 Pro Ser His Ala Asp Lys Leu Ser Tyr Asn Ile Ile Glu Glu Ile Ala
 275 280 285
 Val Lys Phe Leu Ser Lys Leu Leu Ser Ile Phe Pro Lys Val His Lys
 290 295 300
 Glu Arg Thr Lys Ser Leu Glu Thr Asp Met Gln Lys Ile Thr Ser Lys
 305 310 315 320
 Val Leu Asn Ser Val Gln Glu Phe Ile Ser Lys Ser Lys Ile Lys Leu
 325 330 335
 Val Pro Pro Thr Lys Glu Ser Pro Thr Val Pro Val Ala Asp Asn Ala
 340 345 350
 Thr Ile Glu Asn Ile Val Asn Ser Ile Tyr Thr Ser Val Leu Lys His
 355 360 365
 Ser Gly Ser Tyr Thr Ser Val Phe Lys Asp Leu Met Gly Lys Ser Asn
 370 375 380
 Val Leu Ser Asp Thr Ile Gly Phe Leu Met Val Asn Ala Ile Ser Asn
 385 390 395 400
 Ser Glu Phe Gln Pro Gln Val Glu Glu Glu Val Ser Asn Ser Glu Leu
 405 410 415
 Val Leu Glu Ala Val Lys Ile Met Glu Lys Val Ile Lys Ile Ile Asp
 420 425 430
 Glu Leu Lys Ser Lys Glu Lys Ser Ser Ser Arg Lys Gly Leu Thr Leu
 435 440 445
 Asp Ala Lys Leu Leu Glu Glu Val Leu Ala Leu Phe Leu Ala Lys Leu
 450 455 460
 Ile Arg Leu Pro Ser Ser Ser Lys Asp Glu Lys Asn Leu Ser Lys
 465 470 475 480
 Thr Glu Leu Asn Lys Ile Ala Ser Gln Leu Ser Lys Leu Val Thr Ala
 485 490 495

Glu Ile Ser Arg Ser Ser Ile Ser Leu Ile Ala Ser Asp Pro Glu Glu
 500 505 510
 His Cys Leu Asn Pro Glu Asn Thr Glu Arg Ile Tyr Gln Val Val Asp
 515 520 525
 Ser Val Tyr Ser Asn Ile Leu Gln Gln Ser Gly Thr Asn Lys Glu Phe
 530 535 540
 Tyr Tyr Asp Ile Lys Asp Thr Asn Thr Ala Phe Pro Lys Lys Val Ala
 545 550 555 560
 Ser Leu Ile Ile Asp Gly Val Ser Ser Phe Pro Leu Asp Thr Ile Asn
 565 570 575
 Ser Thr Ile Ser Asn Ala Asp Leu Ser Gly Glu Leu Asp Val Asn Arg
 580 585 590
 Ile Val Gln Lys Ala Gln Glu His Ala Phe Asn Val Ile Pro Glu Leu
 595 600 605
 Glu Gln Glu Lys Leu Asp Gln Asn Leu Ser Glu Glu Glu Ser Pro Ile
 610 615 620
 Lys Ile Val Pro His Val Gly Lys Lys Pro Val Lys Ile Asp Pro Lys
 625 630 635 640
 Ile Ile Ser Glu His Leu Ala Val Ile Ser Ile Lys Thr Gln Pro Leu
 645 650 655
 Glu Lys Leu Lys Gln Glu Cys Leu Lys Arg Thr Gly His Ser Ile Ala
 660 665 670
 Glu Leu Arg Arg Ala Ser Ile Ser Gly Arg Asn Tyr Ser Leu Gly Ser
 675 680 685
 Pro Asp Leu Glu Lys Arg Lys Thr Glu Arg Arg Thr Ser Leu Asp Lys
 690 695 700
 Thr Gly Arg Leu Asp Val Lys Pro Leu Glu Ala Val Ala Arg Asn Ser
 705 710 715 720
 Phe Gln Asn Ile Arg Lys Pro Asp Ile Thr Lys Val Glu Leu Leu Lys
 725 730 735
 Asp Val Gln Ser Lys Asn Asp Leu Ile Val Arg Leu Glu Ala His Asp
 740 745 750
 Ile Asp Gln Val Tyr Leu Glu Asn Tyr Ile Lys Glu Glu Arg Asp Ser
 755 760 765
 Asp Glu Asp Glu Val Val Leu Thr Gln Thr Phe Ala Lys Glu Glu Gly
 770 775 780

Ile Lys Val Phe Glu Asp Gln Val Lys Glu Val Lys Lys Pro Ile Gln
 785 790 795 800
 Ser Lys Leu Ser Pro Lys Ser Thr Leu Ser Thr Ser Ser Leu Lys Lys
 805 810 815
 Phe Leu Ser Leu Ser Lys Cys Cys Gln Thr Thr Ala Ser Ala Asn Ile
 820 825 830
 Glu Ser Thr Glu Ala Ile Ser Asn Gln Val Ile Glu Ser Lys Glu Thr
 835 840 845
 His Val Lys Arg Ala Val Ala Glu Leu Asp Met Ala Thr Pro Lys Thr
 850 855 860
 Met Pro Glu Thr Ala Ser Ser Ser Trp Glu Glu Lys Pro Gln Cys Lys
 865 870 875 880
 Lys Glu Glu Lys Asn Leu Val Thr Glu Pro Thr His Tyr Phe Ile His
 885 890 895
 Arg Ile Met Ser Ser Ser Ser Tyr Asn Gln Glu Asp Leu Ile Ser Ser
 900 905 910
 Thr Gly Glu Ala Glu Asp Cys His Ser Asp Pro Ser Ala Lys Ile Leu
 915 920 925
 Glu Glu Ser Ser Gln Glu Gln Lys Pro Glu His Gly Asn Ser Val Lys
 930 935 940
 Phe Ile Thr Ile Phe Glu Arg Ser Lys Asp Val Leu Gly Ser Ala Asn
 945 950 955 960

 Pro Ser Lys Glu Val Ile Ser Glu Thr Pro Lys Pro Asp Val Ser Lys
 965 970 975
 Gln Gly Ser Lys Met Leu Thr Lys Met Ser Ser Ala Leu Ser Lys Val
 980 985 990
 Phe Ser Gln Cys Asn Thr Asn Ile Ser Arg Ser Ser Ser Pro Ala His
 995 1000 1005
 Gln Asp Glu His
 1010

<210> 3909

<211> 829

<212> PRT

<213> Homo sapiens

<400> 3909

Met Thr Glu Asn Lys Thr Val Ser Ser Ser Ser Thr Arg Asp Asp Gln
 1 5 10 15
 Thr Asn Ile Gly Leu Thr Cys Gln Glu Val Lys Ala Leu Arg Glu Lys
 20 25 30
 Ala Trp Ser Arg Thr Asn Glu Gly Asn Ala Met Ser Gln Ser Leu Val
 35 40 45
 Ile Tyr Gly Ala Ser Lys Glu Asn Ser Glu Gly Phe His Glu Ser Lys
 50 55 60
 Met Thr Asn Thr Glu Gly Val Asn Lys Gly Ile Tyr Phe Ser Tyr Pro
 65 70 75 80
 Cys Arg Arg His Ser Cys Ala Val Val Asn Ile Pro Ala Pro Cys Val
 85 90 95
 Asn Lys Met Ile Ser His Ile Gln Asp Val Glu Ser Lys Ile Gln Glu
 100 105 110
 His Leu Lys Arg Phe Glu Thr Ser Phe Glu Glu Trp Ser Arg Thr Ser
 115 120 125

 Ser Thr Lys Asp Leu Lys Glu Asp Trp Ser Val Thr Thr Pro Val Lys
 130 135 140
 Glu Val Lys Pro Gly Glu Lys Arg Asp Glu Lys Cys Pro Glu Leu Lys
 145 150 155 160
 Gln Glu Met Glu Thr Leu Leu Ser Glu Ala Ile Arg Leu Ile Lys Ser
 165 170 175
 Leu Glu Thr Asp Arg Ala Asp Ala Glu Glu Ala Leu Lys Gln Gln Arg
 180 185 190
 Ser Arg Lys Asn Met Ile Asn Met Lys Ile Asp Ser Trp Ser Val Trp
 195 200 205
 Lys Leu Gln Glu Leu Pro Leu Ala Val Gln Lys Glu His Glu Ala Tyr
 210 215 220
 Leu Ser Asp Val Ile Glu Leu Gln Trp His Leu Glu Asp Lys Ala Asn
 225 230 235 240
 Gln Leu Gln His Phe Glu Lys Gln Lys Thr Glu Leu Glu Glu Ala Asn
 245 250 255

Ala Lys Ile Gln Ala Asp Ile Asp Tyr Met Asn Glu His Gly Pro Leu			
260	265	270	
Leu Asp Ser Lys Gln Asn Gln Glu Leu Gln Asp Leu Lys Asn His Tyr			
275	280	285	
Lys Lys Lys Met Glu Val Met Asp Leu His Arg Lys Val Asn Glu Glu			
290	295	300	
Leu Glu Glu Ala Leu Glu Ala Cys Glu Asn Ala Arg Leu Lys Ala Gln			
305	310	315	320
Gln Ile Lys Glu Glu Ile Asp Lys Asp Ile Tyr Gln Asp Glu Lys Thr			
325	330	335	
Ile Glu Ala Tyr Lys Arg Glu Ile Tyr Gln Leu Asn Ser Leu Phe Asp			
340	345	350	
His Tyr Ser Ser Ser Val Ile Asn Val Asn Thr Asn Ile Glu Glu Glu			
355	360	365	
Glu Glu Glu Val Thr Glu Ala Ile Arg Glu Thr Lys Ser Ser Lys Asn			
370	375	380	
Glu Leu His Ser Leu Ser Lys Met Leu Glu Asp Leu Arg Arg Val Tyr			
385	390	395	400
Asp Gln Leu Thr Trp Lys Gln Lys Ser His Glu Asn Gln Tyr Leu Glu			
405	410	415	
Ala Val Asn Asp Phe Tyr Ala Ala Lys Lys Thr Trp Asp Ile Glu Leu			
420	425	430	
Ser Asp Val Ala Lys Asp Phe Ser Ala Ile Ser Leu Ala Cys Thr Lys			
435	440	445	
Leu Thr Glu Asp Asn Lys Lys Leu Glu Ile Asp Ile Asn Lys Ile Thr			
450	455	460	
Glu Lys Thr Asn Glu Ser Ile Arg Lys Lys Ser Lys Tyr Glu Ser Glu			
465	470	475	480
Ile Lys Tyr Leu Thr Ile Met Lys Leu Lys Asn Asp Lys His Leu Lys			
485	490	495	
Asn Ile Tyr Lys Glu Ala Tyr Arg Ile Gly Thr Leu Phe His Leu Thr			
500	505	510	
Lys His Lys Thr Asp Glu Met Glu Asp Lys Ile Ala Glu Val Arg Arg			
515	520	525	
Lys Phe Lys Gly Arg Glu Glu Phe Leu Lys Lys Leu Thr Gln Gly Glu			
530	535	540	

Val Ala Ala Gly Met Val Leu Gln Lys Lys Leu Tyr Ser Ile Tyr Glu
 545 550 555 560
 Val Gln Ala Leu Glu Arg Lys Glu Leu Ile Lys Asn Arg Ala Ile Cys
 565 570 575
 Ala Met Ser Leu Ala Glu Leu Gln Glu Pro Leu Leu Gln Leu Glu Asp
 580 585 590
 Glu Ala Glu Arg Ile Arg Ser Leu Asn Lys Glu His Ser Val Ser Lys
 595 600 605
 Arg Ser Ala Ile Phe Lys Asp Leu Glu Ala Thr Lys Ser Lys Thr Met
 610 615 620
 Ile Phe Tyr Ala Lys Ile Asn Glu Leu Asn Glu Glu Leu Lys Ala Lys
 625 630 635 640
 Glu Glu Glu Lys Lys Ser Phe Asp Gln Thr Leu Glu Ile Leu Lys Asn
 645 650 655
 Lys Phe Ile Thr Met Arg Phe Lys Arg Glu His Ala Gln Thr Val Phe
 660 665 670
 Asp His Tyr Met Gln Glu Lys Lys Asp Cys Glu Glu Arg Ile Phe Glu
 675 680 685
 Glu Asp Gln Arg Phe Arg Val Leu Leu Ala Val Arg Gln Lys Thr Leu
 690 695 700
 Gln Asp Thr Gln Lys Ile Ile Ala Asp Ser Leu Glu Glu Asn Leu Arg
 705 710 715 720
 Leu Ala Gln Glu Tyr Gln Gln Leu Gln Phe Thr Phe Leu Lys Glu Lys
 725 730 735
 Asp Asn Tyr Phe Asn Ile Tyr Asp Lys Gln Leu Ser Leu Asp Thr Ser
 740 745 750
 Ile Arg Asp Lys Lys Gln Leu Cys Gln Leu Gln Arg Arg Met His Thr
 755 760 765
 Leu Trp Gln Glu His Phe Lys Leu Val Val Leu Phe Ser Gln Met Arg
 770 775 780
 Leu Ala Asn Phe Gln Thr Asp Ser Gln Glu Ser Ile Gln Lys Ile Leu
 785 790 795 800
 Ala Val Gln Glu Glu Ser Ser Asn Leu Met Gln His Ile Leu Gly Phe
 805 810 815
 Phe Gln Thr Leu Thr Asp Gly Thr Cys Glu Asn Asp Gly
 820 825

<210> 3910

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3910

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Met Ala Ala Leu Cys Leu Arg Lys Gly Pro Leu Pro Leu Cys Pro Arg
  1              5              10              15
Pro Ser His Gly Leu Lys Ala Met Gly Gly Glu Gly Ser Cys Gln Asp
      20              25              30
Asp Thr Glu Ser Gly Ala Leu Thr Phe Leu Pro Ser Asp Asp Ala Gln
      35              40              45
Pro Gly Lys Ala Leu Arg Pro Gln Arg Ser Gly Pro Gly Gly Ser Glu
      50              55              60
Arg Arg Gly Arg Gly Trp Gly Arg Ala Gly Ala Leu Glu Glu Gln Val
      65              70              75              80
Arg Gln Gly Pro Ser Ala Gln Gly His Pro Arg Thr Gln Ala Arg Ser
      85              90              95
Arg Pro Cys Ser Ala Arg Pro His Cys Ser Cys Gly Lys Gly Lys His
      100             105             110
Gly Ala Leu Pro Gln Gly Gln Cys Ser Ala Trp Leu Glu Leu Met Thr
      115             120             125
Val Thr Val Pro Cys Cys His His Cys Ser His Cys Pro Gly Gly Gln
      130             135             140
Pro Gly Pro Gln Leu His Arg Ala Trp Thr Val Trp Ser Trp Ala Val
      145             150             155             160
Pro Ser Ser Ala Ser Arg Ala Cys Gly Asp Gly His Arg Arg Ser Thr
      165             170             175
Cys Gln Ala Gln Gly Ser Cys Thr Gly Leu Pro Pro Leu Arg Gly Cys
      180             185             190
Leu Pro Arg Leu Val Pro Gly Arg Pro Cys Pro His Leu Arg Gln Gln
      195             200             205
Asp Lys Gly Lys Trp Asn
      210

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<210> 3911

<211> 950

<212> PRT

<213> Homo sapiens

<400> 3911

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Met Glu Asp Lys Leu His Lys Arg Ser Pro Pro Pro Glu Thr Ile Lys
  1             5             10             15
Ser Lys Leu Asn Thr Ser Val Asp Thr His Lys Ile Lys Ser Ser Pro
      20             25             30
Ser Pro Glu Val Val Lys Pro Lys Ile Thr His Ser Pro Asp Ser Val
      35             40             45
Lys Ser Lys Ala Thr Tyr Val Asn Ser Gln Ala Thr Gly Glu Arg Arg
      50             55             60
Leu Ala Asn Lys Ile Glu His Glu Leu Ser Arg Cys Ser Phe His Pro
      65             70             75             80
Ile Pro Thr Arg Ser Ser Thr Leu Glu Thr Thr Lys Ser Pro Leu Ile
      85             90             95
Ile Asp Lys Asn Glu His Phe Thr Val Tyr Arg Asp Pro Ala Leu Ile
      100            105            110
Gly Ser Glu Thr Gly Ala Asn His Ile Ser Pro Phe Leu Ser Gln His
      115            120            125
Pro Phe Pro Leu His Ser Ser Ser His Arg Thr Cys Leu Asn Pro Gly
      130            135            140
Thr His His Pro Ala Leu Thr Pro Ala Pro His Leu Leu Ala Gly Ser
      145            150            155            160
Ser Ser Gln Thr Pro Leu Pro Thr Ile Asn Thr His Pro Leu Thr Ser
      165            170            175
Gly Pro His His Ala Val His His Pro His Leu Leu Pro Thr Val Leu
      180            185            190
Pro Gly Val Pro Thr Ala Ser Leu Leu Gly Gly His Pro Arg Leu Glu
      195            200            205
Ser Ala His Ala Ser Ser Leu Ser His Leu Ala Leu Ala His Gln Gln
      210            215            220

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Gln	Gln	Gln	Leu	Leu	Gln	His	Gln	Ser	Pro	His	Leu	Leu	Gly	Gln	Ala
225					230					235					240
His	Pro	Ser	Ala	Ser	Tyr	Asn	Gln	Leu	Gly	Leu	Tyr	Pro	Ile	Ile	Trp
				245					250						255
Gln	Tyr	Pro	Asn	Gly	Thr	His	Ala	Tyr	Ser	Gly	Leu	Gly	Leu	Pro	Ser
				260				265					270		
Ser	Lys	Trp	Val	His	Pro	Glu	Asn	Ala	Val	Asn	Ala	Glu	Ala	Ser	Leu
		275					280					285			
Arg	Arg	Asn	Ser	Pro	Ser	Pro	Trp	Leu	His	Gln	Pro	Thr	Pro	Val	Thr
	290					295					300				
Ser	Ala	Asp	Gly	Ile	Gly	Leu	Leu	Ser	His	Ile	Pro	Val	Arg	Pro	Ser
305					310					315					320
Ser	Ala	Glu	Pro	His	Arg	Pro	Leu	Lys	Ile	Thr	Ala	His	Ser	Ser	Pro
				325					330					335	
Pro	Leu	Thr	Lys	Thr	Leu	Val	Asp	His	His	Lys	Glu	Glu	Leu	Glu	Arg
		340					345						350		
Lys	Ala	Phe	Met	Glu	Pro	Leu	Arg	Ser	Val	Ala	Ser	Thr	Ser	Ala	Lys
	355						360					365			
Asn	Asp	Leu	Asp	Leu	Asn	Arg	Ser	Gln	Thr	Gly	Lys	Asp	Cys	His	Leu
	370					375					380				
His	Arg	His	Phe	Val	Asp	Pro	Val	Leu	Asn	Gln	Leu	Gln	Arg	Pro	Pro
385					390					395					400
Gln	Glu	Thr	Gly	Glu	Arg	Leu	Asn	Lys	Tyr	Lys	Glu	Glu	His	Arg	Arg
			405						410					415	
Ile	Leu	Gln	Glu	Ser	Ile	Asp	Val	Ala	Pro	Phe	Thr	Thr	Lys	Ile	Lys
		420						425					430		
Gly	Leu	Glu	Gly	Glu	Arg	Glu	Asn	Tyr	Ser	Arg	Val	Ala	Ser	Ser	Ser
	435						440					445			
Ser	Ser	Pro	Lys	Ser	His	Ile	Ile	Lys	Gln	Asp	Met	Asp	Val	Glu	Arg
	450					455				460					
Ser	Val	Ser	Asp	Leu	Tyr	Lys	Met	Lys	His	Ser	Val	Pro	Gln	Ser	Leu
465					470					475					480
Pro	Gln	Ser	Asn	Tyr	Phe	Thr	Thr	Leu	Ser	Asn	Ser	Val	Val	Asn	Glu
			485						490					495	
Pro	Pro	Arg	Ser	Tyr	Pro	Ser	Lys	Glu	Val	Ser	Asn	Ile	Tyr	Gly	Asp
		500						505					510		

Lys Gln Ser Asn Ala Leu Ala Ala Ala Ala Ala Asn Pro Gln Thr Leu
 515 520 525
 Thr Ser Phe Ile Thr Ser Leu Ser Lys Pro Pro Pro Leu Ile Lys His
 530 535 540
 Gln Pro Glu Ser Glu Gly Leu Val Gly Lys Ile Pro Glu His Leu Pro
 545 550 555 560
 His Gln Ile Ala Ser His Ser Val Thr Thr Phe Arg Asn Asp Cys Arg
 565 570 575
 Ser Pro Thr His Leu Thr Val Ser Ser Thr Asn Thr Leu Arg Ser Met
 580 585 590
 Pro Ala Leu His Arg Ala Pro Val Phe His Pro Pro Ile His His Ser
 595 600 605
 Leu Glu Arg Lys Glu Gly Ser Tyr Ser Ser Leu Ser Pro Pro Thr Leu
 610 615 620
 Thr Pro Val Met Pro Val Asn Ala Gly Gly Lys Val Gln Glu Ser Gln
 625 630 635 640
 Lys Pro Pro Thr Leu Ile Pro Glu Pro Lys Asp Ser Gln Ala Asn Phe
 645 650 655
 Lys Ser Ser Ser Glu Gln Ser Leu Thr Glu Met Trp Arg Pro Asn Asn
 660 665 670
 Asn Leu Ser Lys Glu Lys Thr Glu Trp His Val Glu Lys Ser Ser Gly
 675 680 685
 Lys Leu Gln Ala Ala Met Ala Ser Val Ile Val Arg Pro Ser Ser Ser
 690 695 700
 Thr Lys Thr Asp Ser Met Pro Ala Met Gln Leu Ala Ser Lys Asp Arg
 705 710 715 720
 Val Ser Glu Arg Ser Ser Ala Gly Ala His Lys Thr Asp Cys Leu Lys
 725 730 735
 Leu Ala Glu Ala Gly Glu Thr Gly Arg Ile Ile Leu Pro Asn Val Asn
 740 745 750
 Ser Asp Ser Val His Thr Lys Ser Glu Lys Asn Phe Gln Ala Val Ser
 755 760 765
 Gln Gly Ser Val Pro Ser Ser Val Met Ser Ala Val Asn Thr Met Cys
 770 775 780
 Asn Thr Lys Thr Asp Val Ile Thr Ser Ala Ala Asp Thr Thr Ser Val
 785 790 795 800

Ser Ser Trp Gly Gly Ser Glu Val Ile Ser Ser Leu Ser Asn Thr Ile
 805 810 815
 Leu Ala Ser Thr Ser Ser Glu Cys Val Ser Ser Lys Ser Val Ser Gln
 820 825 830
 Pro Val Ala Gln Lys Gln Glu Cys Lys Val Ser Thr Thr Ala Pro Val
 835 840 845
 Thr Leu Ala Ser Ser Lys Thr Gly Ser Val Val Gln Pro Ser Ser Gly
 850 855 860
 Phe Ser Gly Thr Thr Asp Phe Ile His Leu Lys Lys His Lys Ala Ala
 865 870 875 880
 Leu Ala Ala Ala Gln Tyr Lys Ser Ser Asn Ala Ser Glu Thr Glu Pro
 885 890 895
 Asn Ala Ile Lys Asn Gln Thr Leu Ser Ala Ser Leu Pro Leu Asp Ser
 900 905 910
 Thr Val Ile Cys Ser Thr Ile Asn Lys Ala Asn Ser Val Gly Asn Gly
 915 920 925
 Gln Ala Ser Gln Thr Ser Gln Pro Asn Tyr His Thr Lys Leu Lys Lys
 930 935 940
 Ala Trp Leu Thr Arg His
 945 950

<210> 3912

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3912

Met Ile Ser Val His Cys Asn Leu Cys Leu Pro Gly Ser Ser Asn Phe
 1 5 10 15
 Cys Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met His His His
 20 25 30
 Val Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His Val
 35 40 45

Gly Gln Ala Gly Leu Lys Leu Gln Ala Ser Ser Asp Leu Ser Ala Phe
 50 55 60
 Gln Ser Ala Gly Ile Thr Gly Gly Ser Gln Cys Ile Leu Pro Ala Asp
 65 70 75 80
 Phe Val Phe Cys Cys Cys Cys Phe Phe Val Phe Cys Phe Ser Phe Leu
 85 90 95
 Ala Leu Leu Gly Ser Leu His Val Arg Leu Ser Phe Ile Val Cys Phe
 100 105 110

<210> 3913

<211> 265

<212> PRT

<213> Homo sapiens

<400> 3913

Met Arg Asp Leu Gly Glu Asn Thr Ala Ser Arg Arg Asn Ala Pro Ala
 1 5 10 15
 His Pro Ser Arg Asn Pro His His Leu Pro Pro Thr Pro Asp Gln Ser
 20 25 30
 Ser Arg Arg Pro Gly Val Ser His Gln Arg Ala Glu Arg Ala Phe Glu
 35 40 45
 Leu Leu Leu His His Asp Gln Asp Ala Leu Gly His Leu Val His Val
 50 55 60
 Cys Val His Gln Ser Cys Ser Glu Ser Pro Gln Gly Leu Phe His Asp
 65 70 75 80
 Ala His Pro Gly Val Thr Leu Thr Leu Gly Gln Glu Glu Lys Ala Cys
 85 90 95
 Pro Glu Asp Ser Ala Ser Ser Ser Ser Ser Leu Pro Ala Pro Ser Val
 100 105 110
 Leu Gly Ala His Thr Gly Val Gly Pro Gln Ala Gly Gly His Val Pro
 115 120 125
 Gly Trp Gln Asp Leu Ser Thr Val Lys Leu Asp Ala Pro Ala Gly Pro
 130 135 140
 Val Leu Pro Ala Arg Ile Pro Leu Pro Gln Asp Ala Leu His Thr Leu
 145 150 155 160

Arg Ile Pro Ser Arg Cys Ser Gly Ala Cys Thr Glu Gly Leu Gly Pro
 165 170 175
 Ala Pro Gly Asn Ser Lys Glu Ala Asn Gly Phe Met Ser Arg Phe Cys
 180 185 190
 Gln Ile Ala Ser Glu Ala Ala Leu Phe Ala Val Ala Ala Glu Cys Arg
 195 200 205
 Ala Gly His Leu Ser Gly Gln Ser Gly Ala Leu Leu Pro Cys Ile Ser
 210 215 220
 Trp Ala Met Arg Gly Asp Leu Cys Pro Leu His Arg Ser Cys Val Pro
 225 230 235 240
 Cys Ala Cys Asp Arg Val Phe Pro Val Tyr Ser Met Leu Leu His Val
 245 250 255
 Phe Gln Phe Arg Phe Val Val Cys Glu
 260 265

<210> 3914

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3914

Met Ser Thr Val Gly Leu Phe His Phe Pro Thr Pro Leu Thr Arg Ile
 1 5 10 15
 Cys Pro Ala Pro Trp Gly Leu Arg Leu Trp Glu Lys Leu Thr Leu Leu
 20 25 30
 Ser Pro Gly Ile Ala Val Thr Pro Val Gln Met Ala Gly Lys Lys Asp
 35 40 45
 Tyr Pro Ala Leu Leu Ser Leu Asp Glu Asn Glu Leu Glu Glu Gln Phe
 50 55 60
 Val Lys Gly His Gly Pro Gly Gly Gln Ala Thr Asn Lys Thr Ser Asn
 65 70 75 80
 Cys Val Val Leu Lys His Ile Pro Ser Gly Ile Val Val Lys Cys His
 85 90 95
 Gln Thr Arg Ser Val Asp Gln Asn Arg Lys Leu Ala Arg Lys Ile Leu
 100 105 110

Gln Glu Lys Val Asp Val Phe Tyr Asn Gly Glu Asn Ser Pro Val His

115

120

125

Lys Glu Lys Arg Glu Ala Ala Lys Lys Lys

130

135

<210> 3915

<211> 297

<212> PRT

<213> Homo sapiens

<400> 3915

Met Tyr Ile Ser Pro Pro Lys Asp Trp Trp Asp Ala Gly Asp Pro Ser

1

5

10

15

Leu Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val Val Asn

20

25

30

Arg Lys Phe Phe Gly Glu Ile Gly Leu Leu Asp Pro Gly Met Asp Val

35

40

45

Tyr Gly Gly Glu Asn Ile Glu Leu Gly Ile Lys Val Trp Leu Cys Gly

50

55

60

Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile Glu Arg

65

70

75

80

Lys Lys Lys Pro Tyr Asn Ser Asn Ile Gly Phe Tyr Thr Lys Arg Asn

85

90

95

Ala Leu Arg Val Ala Glu Val Trp Met Asp Asp Tyr Lys Ser His Val

100

105

110

Tyr Ile Ala Trp Asn Leu Pro Leu Glu Asn Pro Gly Ile Asp Ile Gly

115

120

125

Asp Val Ser Glu Arg Arg Ala Leu Arg Lys Ser Leu Lys Cys Lys Asn

130

135

140

Phe Gln Trp Tyr Leu Asp His Val Tyr Pro Glu Met Arg Arg Tyr Asn

145

150

155

160

Asn Thr Val Ala Tyr Gly Glu Leu Arg Asn Asn Lys Ala Lys Asp Val

165

170

175

Cys Leu Asp Gln Gly Pro Leu Glu Asn His Thr Ala Ile Leu Tyr Pro

180

185

190

Cys His Gly Trp Gly Pro Gln Leu Ala Arg Tyr Thr Lys Glu Gly Phe
 195 200 205
 Leu His Leu Gly Ala Leu Gly Thr Thr Thr Leu Leu Pro Asp Thr Arg
 210 215 220
 Cys Leu Val Asp Asn Ser Lys Ser Arg Leu Pro Gln Leu Leu Asp Cys
 225 230 235 240
 Asp Lys Val Lys Ser Ser Leu Tyr Lys Arg Trp Asn Phe Ile Gln Asn
 245 250 255
 Gly Ala Ile Met Asn Lys Gly Thr Gly Arg Cys Leu Glu Val Glu Asn
 260 265 270
 Arg Gly Leu Ala Gly Ile Asp Leu Ile Leu Arg Ser Cys Thr Gly Gln
 275 280 285
 Arg Trp Thr Ile Lys Asn Ser Ile Lys
 290 295

<210> 3916

<211> 978

<212> PRT

<213> Homo sapiens

<400> 3916

Met Ala Val Lys Thr Ser Glu Val Met Ala Gln Leu Thr Glu Ser Arg
 1 5 10 15
 Gln Ser Ile Leu Lys Leu Glu Ser Glu Leu Glu Asn Lys Asp Glu Ile
 20 25 30
 Leu Arg Asp Lys Phe Ser Leu Met Asn Glu Asn Arg Glu Leu Lys Val
 35 40 45
 Arg Val Ala Ala Gln Asn Glu Arg Leu Asp Leu Cys Gln Gln Glu Ile
 50 55 60
 Glu Ser Ser Arg Val Glu Leu Arg Ser Leu Glu Lys Ile Ile Ser Gln
 65 70 75 80
 Leu Pro Leu Lys Arg Glu Leu Phe Gly Phe Lys Ser Tyr Leu Ser Lys
 85 90 95

Tyr Gln Met Ser Ser Phe Ser Asn Lys Glu Asp Arg Cys Ile Gly Cys

100	105	110	
Cys Glu Ala Asn Lys Leu Val	Ile Ser Glu Leu Arg	Ile Lys Leu Ala	
115	120	125	
Ile Lys Glu Ala Glu Ile Gln Lys Leu	His Ala Asn Leu Thr	Ala Asn	
130	135	140	
Gln Leu Ser Gln Ser Leu Ile Thr	Cys Asn Asp Ser Gln Glu Ser	Ser	
145	150	155	160
Lys Leu Ser Ser Leu Glu Thr Glu Pro Val	Lys Leu Gly Gly His Gln		
165	170	175	
Val Ala Glu Ser Val Lys Asp Gln Asn Gln His Thr	Met Asn Lys Gln		
180	185	190	
Tyr Glu Lys Glu Arg Gln Arg Leu Val Thr Gly Ile Glu Glu Leu Arg			
195	200	205	
Thr Lys Leu Ile Gln Ile Glu Ala Glu Asn Ser Asp Leu Lys Val Asn			
210	215	220	
Met Ala His Arg Thr Ser Gln Phe Gln Leu Ile Gln Glu Glu Leu Leu			
225	230	235	240
Glu Lys Ala Ser Asn Ser Ser Lys Leu Glu Ser Glu Met Thr Lys Lys			
245	250	255	
Cys Ser Gln Leu Leu Thr Leu Glu Lys Gln Leu Glu Glu Lys Ile Val			
260	265	270	
Ala Tyr Ser Ser Ile Ala Ala Lys Asn Ala Glu Leu Glu Gln Glu Leu			
275	280	285	
Met Glu Lys Asn Glu Lys Ile Arg Ser Leu Glu Thr Asn Ile Asn Thr			
290	295	300	
Glu His Glu Lys Ile Cys Leu Ala Phe Glu Lys Ala Lys Lys Ile His			
305	310	315	320
Leu Glu Gln His Lys Glu Met Glu Lys Gln Ile Glu Arg Leu Glu Ala			
325	330	335	
Gln Leu Glu Lys Lys Asp Gln Gln Phe Lys Glu Gln Glu Lys Thr Met			
340	345	350	
Ser Met Leu Gln Gln Asp Ile Ile Cys Lys Gln His His Leu Glu Ser			
355	360	365	
Leu Asp Arg Leu Leu Thr Glu Ser Lys Gly Glu Met Lys Lys Glu Asn			
370	375	380	
Met Lys Lys Asp Glu Ala Leu Lys Ala Leu Gln Asn Gln Val Ser Glu			

385	390	395	400
Glu Thr Ile Lys Val Arg Gln Leu Asp Ser Ala Leu Glu Ile Cys Lys			
405	410	415	
Glu Glu Leu Val Leu His Leu Asn Gln Leu Glu Gly Asn Lys Glu Lys			
420	425	430	
Phe Glu Lys Gln Leu Lys Lys Lys Ser Glu Glu Val Tyr Cys Leu Gln			
435	440	445	
Lys Glu Leu Lys Ile Lys Asn His Ser Leu Gln Glu Thr Ser Glu Gln			
450	455	460	
Asn Val Ile Leu Gln His Thr Leu Gln Gln Gln Gln Met Leu Gln			
465	470	475	480
Gln Glu Thr Ile Arg Asn Gly Glu Leu Glu Asp Thr Gln Thr Lys Leu			
485	490	495	
Glu Lys Gln Val Ser Lys Leu Glu Gln Glu Leu Gln Lys Gln Arg Glu			
500	505	510	
Ser Ser Ala Glu Lys Leu Arg Lys Met Glu Glu Lys Cys Glu Ser Ala			
515	520	525	
Ala His Glu Ala Asp Leu Lys Arg Gln Lys Val Ile Glu Leu Thr Gly			
530	535	540	
Thr Ala Arg Gln Val Lys Ile Glu Met Asp Gln Tyr Lys Glu Glu Leu			
545	550	555	560
Ser Lys Met Glu Lys Glu Ile Met His Leu Lys Arg Asp Gly Glu Asn			
565	570	575	
Lys Ala Met His Phe Ser Gln Leu Asp Met Ile Leu Asp Gln Thr Lys			
580	585	590	
Thr Glu Leu Glu Lys Lys Thr Asn Ala Val Lys Glu Leu Glu Lys Leu			
595	600	605	
Gln His Ser Thr Glu Thr Glu Leu Thr Glu Ala Leu Gln Lys Arg Glu			
610	615	620	
Val Leu Glu Thr Glu Leu Gln Asn Ala His Gly Glu Leu Lys Ser Thr			
625	630	635	640
Leu Arg Gln Leu Gln Glu Leu Arg Asp Val Leu Gln Lys Ala Gln Leu			
645	650	655	
Ser Leu Glu Glu Lys Tyr Thr Thr Ile Lys Asp Leu Thr Ala Glu Leu			
660	665	670	
Arg Glu Cys Lys Met Glu Ile Glu Asp Glu Lys Gln Glu Leu Leu Glu			

675	680	685	
Met Asp Gln Ala Leu Lys Glu Arg Asn Trp Glu Leu Lys Gln Arg Ala			
690	695	700	
Ala Gln Val Thr His Leu Asp Met Thr Ile Arg Glu His Arg Gly Glu			
705	710	715	720
Met Glu Gln Lys Ile Ile Lys Leu Glu Gly Thr Leu Glu Lys Ser Glu			
725	730	735	
Leu Glu Leu Lys Glu Cys Asn Lys Gln Ile Glu Ser Leu Asn Asp Lys			
740	745	750	
Leu Gln Asn Ala Lys Glu Gln Leu Arg Glu Lys Glu Phe Ile Met Leu			
755	760	765	
Gln Asn Glu Gln Glu Ile Ser Gln Leu Lys Lys Glu Ile Glu Arg Thr			
770	775	780	
Gln Gln Arg Met Lys Glu Met Glu Ser Val Met Lys Glu Gln Glu Gln			
785	790	795	800
Tyr Ile Ala Thr Gln Cys Lys Glu Ala Ile Asp Leu Gly Gln Lys Leu			
805	810	815	
Arg Leu Thr Arg Glu Gln Val Gln Asn Ser His Thr Glu Leu Ala Glu			
820	825	830	
Ala Arg His Gln Gln Val Gln Ala Gln Arg Glu Ile Glu Arg Leu Ser			
835	840	845	
Ser Glu Leu Glu Asp Met Lys Gln Leu Ser Lys Glu Lys Asp Ala His			
850	855	860	
Gly Asn His Leu Ala Glu Glu Leu Gly Ala Ser Lys Val Arg Glu Ala			
865	870	875	880
His Leu Glu Ala Arg Met Gln Ala Glu Ile Lys Lys Leu Ser Ala Glu			
885	890	895	
Val Glu Ser Leu Lys Glu Ala Tyr His Met Glu Met Ile Ser His Gln			
900	905	910	
Glu Asn His Ala Lys Trp Lys Ile Ser Ala Asp Ser Gln Lys Ser Ser			
915	920	925	
Val Gln Gln Leu Asn Glu Gln Leu Glu Lys Ala Lys Leu Glu Leu Glu			
930	935	940	
Glu Ala Gln Asp Thr Val Ser Asn Leu His Gln Gln Val Gln Asp Arg			
945	950	955	960
Asn Glu Val Ile Glu Ala Ala Asn Glu Ala Leu Leu Thr Lys Gly Glu			

	965	970	975
Asn Val			
<210> 3917			
<211> 874			
<212> PRT			
<213> Homo sapiens			
<400> 3917			
Met Ser Asp Gly Lys Val Gly Glu Ser Ser Lys Lys Ser Glu Ile Lys			
1 5 10 15			
Glu Ile Glu Tyr Thr Lys Leu Lys Lys Ser Lys Ile Glu Asp Ala Phe			
20 25 30			
Ser Lys Glu Gly Lys Ser Asp Val Leu Leu Lys Leu Val Leu Glu Gln			
35 40 45			
Gly Asp Ser Ser Glu Ile Leu Ser Lys Lys Asp Leu Pro Leu Asp Ser			
50 55 60			
Glu Asn Val Gln Lys Asp Leu Val Gly Leu Ala Ile Glu Asn Leu His			
65 70 75 80			
Lys Ser Glu Glu Met Leu Lys Glu Arg Gln Ser Asp Gln Asp Met Asn			
85 90 95			
His Ser Pro Asn Ile Gln Ser Gly Lys Asp Ile His Glu Gln Lys Asn			
100 105 110			
Thr Lys Glu Lys Asp Leu Ser Trp Ser Glu His Leu Phe Ala Pro Lys			
115 120 125			
Glu Ile Pro Tyr Ser Glu Asp Phe Glu Val Ser Ser Phe Lys Lys Glu			
130 135 140			
Ile Ser Ala Glu Leu Tyr Lys Asp Asp Phe Glu Val Ser Ser Leu Leu			
145 150 155 160			
Ser Leu Arg Lys Asp Ser Gln Ser Cys Arg Asp Lys Pro Gln Pro Met			
165 170 175			
Arg Ser Ser Thr Ser Gly Ala Thr Ser Phe Gly Ser Asn Glu Glu Ile			
180 185 190			

Ser Glu Cys Leu Ser Glu Lys Ser Leu Ser Ile His Ser Asn Val His
 195 200 205
 Ser Asp Arg Leu Leu Glu Leu Lys Ser Pro Thr Glu Leu Met Lys Ser
 210 215 220
 Glu Glu Arg Ser Asp Val Glu His Glu Gln Gln Val Thr Glu Ser Pro
 225 230 235 240
 Ser Leu Ala Ser Val Pro Thr Ala Asp Glu Leu Phe Asp Phe His Ile
 245 250 255
 Gly Asp Arg Val Leu Ile Gly Asn Val Gln Pro Gly Ile Leu Arg Phe
 260 265 270
 Lys Gly Glu Thr Ser Phe Ala Lys Gly Phe Trp Ala Gly Val Glu Leu
 275 280 285
 Asp Lys Pro Glu Gly Asn Asn Asn Gly Thr Tyr Asp Gly Ile Ala Tyr
 290 295 300
 Phe Glu Cys Lys Glu Lys His Gly Ile Phe Ala Pro Pro Gln Lys Ile
 305 310 315 320
 Ser His Ile Pro Glu Asn Phe Asp Asp Tyr Val Asp Ile Asn Glu Asp
 325 330 335
 Glu Asp Cys Tyr Ser Asp Glu Arg Tyr Gln Cys Tyr Asn Gln Glu Gln
 340 345 350
 Asn Asp Thr Glu Gly Pro Lys Asp Arg Glu Lys Asp Val Ser Glu Tyr
 355 360 365
 Phe Tyr Glu Lys Ser Leu Pro Ser Val Asn Asp Ile Glu Ala Ser Val
 370 375 380
 Asn Arg Ser Arg Ser Leu Lys Ile Glu Thr Asp Asn Val Gln Asp Ile
 385 390 395 400
 Ser Gly Val Leu Glu Ala His Val His Gln Gln Ser Ser Val Asp Ser
 405 410 415
 Gln Ile Ser Ser Lys Glu Asn Lys Asp Leu Ile Ser Asp Ala Thr Glu
 420 425 430
 Lys Val Ser Ile Ala Ala Glu Asp Asp Thr Leu Asp Asn Thr Phe Ser
 435 440 445
 Glu Glu Leu Glu Lys Gln Gln Gln Phe Thr Glu Glu Glu Asp Asn Leu
 450 455 460
 Tyr Ala Glu Ala Ser Glu Lys Leu Cys Thr Pro Leu Leu Asp Leu Leu
 465 470 475 480

Thr Arg Glu Lys Asn Gln Leu Glu Ala Gln Leu Lys Ser Ser Leu Asn
 485 490 495
 Glu Glu Lys Lys Ser Lys Gln Gln Leu Glu Lys Ile Ser Leu Leu Thr
 500 505 510
 Asp Ser Leu Leu Lys Val Phe Val Lys Asp Thr Val Asn Gln Leu Gln
 515 520 525
 Gln Ile Lys Lys Thr Arg Asp Glu Lys Ile Gln Leu Ser Asn Gln Glu
 530 535 540
 Leu Leu Gly Asp Asp Gln Lys Lys Val Thr Pro Gln Asp Leu Ser Gln
 545 550 555 560
 Asn Val Glu Glu Gln Ser Pro Ser Ile Ser Gly Cys Phe Leu Ser Ser
 565 570 575
 Glu Leu Glu Asp Glu Lys Glu Glu Ile Ser Ser Pro Asp Met Cys Pro
 580 585 590
 Arg Pro Glu Ser Pro Val Phe Gly Ala Ser Gly Gln Glu Glu Leu Ala
 595 600 605
 Lys Arg Leu Ala Glu Leu Glu Leu Ser Arg Glu Phe Leu Ser Ala Leu
 610 615 620
 Gly Asp Asp Gln Asp Trp Phe Asp Glu Asp Phe Gly Leu Ser Ser Ser
 625 630 635 640
 His Lys Ile Gln Lys Asn Lys Ala Glu Glu Thr Ile Val Pro Leu Met
 645 650 655
 Ala Glu Pro Lys Arg Val Thr Gln Gln Pro Cys Glu Thr Leu Leu Ala
 660 665 670
 Val Pro His Thr Ala Glu Glu Val Glu Ile Leu Val His Asn Ala Ala
 675 680 685
 Glu Glu Leu Trp Lys Trp Lys Glu Leu Gly His Asp Leu His Ser Ile
 690 695 700
 Ser Ile Pro Thr Lys Leu Leu Gly Cys Ala Ser Lys Gly Leu Asp Ile
 705 710 715 720
 Glu Ser Thr Ser Lys Arg Val Tyr Lys Gln Ala Val Phe Asp Leu Thr
 725 730 735
 Lys Glu Ile Phe Glu Glu Ile Phe Ala Glu Asp Pro Asn Leu Asn Gln
 740 745 750
 Pro Val Trp Met Lys Pro Cys Arg Ile Asn Ser Ser Tyr Phe Arg Arg
 755 760 765

Val Lys Asn Pro Asn Asn Leu Asp Glu Ile Lys Ser Phe Ile Ala Ser
 770 775 780
 Glu Val Leu Lys Leu Phe Ser Leu Lys Lys Glu Pro Asn His Lys Thr
 785 790 795 800
 Asp Trp Gln Lys Met Met Lys Phe Gly Arg Lys Lys Arg Asp Arg Val
 805 810 815
 Asp His Ile Leu Val Gln Glu Leu His Glu Glu Glu Ala Gln Trp Val
 820 825 830
 Asn Tyr Asp Glu Asp Glu Leu Cys Val Lys Met Gln Leu Ala Asp Gly
 835 840 845
 Ile Phe Glu Thr Leu Ile Lys Asp Thr Ile Asp Val Leu Asn Gln Ile
 850 855 860
 Ser Glu Lys Gln Gly Arg Met Leu Leu Val
 865 870

<210> 3918

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3918

Met Leu His Pro Phe Thr Gly Ile Pro Ser Trp Phe Thr Met Ser Ser
 1 5 10 15
 Tyr Ile His His Met Ser Gly Leu Ser Gly Leu Pro Leu Pro Pro Trp
 20 25 30
 Arg Gly Ser Arg Gln His Asn Asn Ala His Phe Arg Val Gly Leu Leu
 35 40 45
 Gly Pro Leu Leu Ala Pro Ala Pro Ile Gly Ser Ile Pro Trp Ser Gln
 50 55 60
 Thr Leu Arg Trp Arg Ser Cys Ala Gly Val Tyr Trp Arg Val Leu Leu
 65 70 75 80
 Gly Thr Thr Pro Val Arg Gly Glu Gly Arg Arg Val Gly Gln Gln Glu
 85 90 95
 Lys Leu Gly Cys Glu Ala Phe Ser Ser Leu Ser Gln Phe His Arg Gln
 100 105 110

Pro Trp Arg Trp Ala Gly Pro Ser Glu Leu Ser Pro Leu Arg Pro Arg
 115 120 125
 Asp Gln Ala Ser Val His Pro His Ser Thr Ser Val Thr Thr Gly Ser
 130 135 140
 Gly Ala Thr Ser Ala Arg Gly Thr Ala Trp Gly Gly Thr Arg Met Arg
 145 150 155 160
 Gly Val Ser Arg Gln His Pro Trp Gln
 165

<210> 3919

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3919

Met Ser Glu Leu Ile Ser Asn Gly Ile Gln Ile Tyr Gln Leu Pro Thr
 1 5 10 15
 Asp Glu Glu Thr Ala Ala Gln Ala Asn Ser Ser Val Ser Gly Leu Leu
 20 25 30
 Pro Phe Ala Val Val Gly Ser Thr Asp Glu Val Lys Val Gly Lys Arg
 35 40 45
 Met Val Arg Gly Arg His Tyr Pro Trp Gly Val Leu Gln Val Glu Asn
 50 55 60
 Glu Asn His Cys Asp Phe Val Lys Leu Arg Asp Met Leu Leu Cys Thr
 65 70 75 80
 Asn Met Glu Asn Leu Lys Glu Lys Thr His Thr Gln His Tyr Glu Cys
 85 90 95
 Tyr Arg Tyr Gln Lys Leu Gln Lys Met Gly Phe Thr Asp Val Gly Pro
 100 105 110
 Asn Asn Gln Pro Val Ser Phe Gln Glu Ile Phe Glu Ala Lys Arg Gln
 115 120 125
 Glu Phe Tyr Asp Gln Cys Gln Arg Glu Glu Glu Glu Leu Lys Gln Arg
 130 135 140
 Phe Met Gln Arg Val Lys Glu Lys Glu Ala Thr Phe Lys Glu Ala Glu

145	150	155	160
Lys Glu Leu Gln Asp Lys Phe Glu His Leu Lys Met Ile Gln Gln Glu			
165	170	175	
Glu Ile Arg Lys Leu Glu Glu Glu Lys Lys Gln Leu Glu Gly Glu Ile			
180	185	190	
Ile Asp Phe Tyr Lys Met Lys Ala Ala Ser Glu Ala Leu Gln Thr Gln			
195	200	205	
Leu Ser Thr Asp Thr Lys Lys Asp Lys His Arg Lys Lys			
210	215	220	

<210> 3920

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3920

Met Leu Phe Ile Glu Leu Val Leu Tyr Leu Pro Ser Val Ser Lys Phe			
1	5	10	15
Ile Lys Ile Arg Asp Phe Leu Cys Phe Pro Arg Glu Asn Ser Thr Phe			
20	25	30	
Leu Leu Thr Val Arg Pro Val His Trp Cys Leu Ala Pro Val Gln Ala			
35	40	45	
Asn Gly Ser Ala Met Ser Ser Ala Pro Ile Ser Trp Arg Asp Gly Gln			
50	55	60	
Arg His Phe Gln Lys Cys Ser Ser Leu Gln Pro Phe Thr Trp Asn Lys			
65	70	75	80
Cys His Lys Asp Leu Trp Arg Cys Phe Val Pro Gly Phe Ser Thr Val			
85	90	95	
Ser Ala Phe Gly Asp Glu Glu Glu Phe Leu Pro Ile Leu Val Val Leu			
100	105	110	
Ala Ser Ile Gly			
115			

<210> 3921

<211> 978

<212> PRT

<213> Homo sapiens

<400> 3921

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Met Lys Ser Gly Met Ile Asn Leu Thr Ser Gly Leu Ala Thr Gly Val
  1             5             10             15
Thr Asn Lys Lys Glu Val Asp Glu Asp Lys Val Gly Ile Cys Thr Gln
      20             25             30
Lys His Ser Glu Asn Val Ser Lys Val Thr Ser Thr Thr Thr Val Lys
      35             40             45
Ser Lys Asp Thr Gln Glu Pro Asn Leu Ser Glu Thr Phe Asn Asn Asn
      50             55             60
Glu Ile Glu Lys Lys Arg Asn Leu Ile Pro Thr Asp Lys Lys Gly Lys
      65             70             75             80
Asp Asp Glu Ile Asn Thr His Phe Ser Leu Ile Ile Asp Asp Thr Glu
      85             90             95
Tyr Glu Lys Glu Val Leu Gly Ser Asp Ser Glu Ile Gly Tyr Lys Lys
      100            105            110
Lys Ile Asp Asn Ala Arg Glu Ser Ser Phe Lys Lys Asp Asp Lys Leu
      115            120            125
Phe Gln Leu Ser Ser Leu Lys Ser Lys Arg Asn Leu Gly Thr Thr Thr
      130            135            140
Asp Thr Leu Glu Ile Arg Thr Arg Thr Ser Ser Asn Glu Gly Arg Arg
      145            150            155            160
Asp Ser Pro Thr Gln Thr Cys Arg Asp Glu Glu His His Ser Asp Tyr
      165            170            175
Glu His Val Gln Asn Val Ile Glu Asn Ile Phe Glu Asp Val Leu Glu
      180            185            190
Leu Ser Ser Ser Pro Glu Pro Ala Tyr Tyr Ser Lys Leu Ser Tyr Asp
      195            200            205
Gln Ser Pro Pro Gly Asp Asn Val Leu Asn Val Ile Gln Glu Ile Ser
      210            215            220
Arg Asp Ser Ala Gln Ser Val Thr Thr Lys Lys Val Ser Ser Ser Thr
      225            230            235            240

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Asn Lys Asn Ile Ser Ala Lys Glu Lys Glu Glu Glu Glu Arg Glu Lys
 245 250 255
 Glu Lys Val Arg Glu Glu Ile Lys Ser Glu Pro Ser Lys Pro Asp Asp
 260 265 270
 Pro Gln Asn Gln Gln Glu Ser Lys Pro Gly Ile Phe Pro Ala Lys Phe
 275 280 285
 Leu Glu Asp Val Ile Thr Glu Met Val Lys Gln Leu Ile Phe Ser Ser
 290 295 300
 Ile Pro Glu Thr Gln Ile Gln Asp Arg Cys Gln Asn Val Ser Asp Lys
 305 310 315 320
 Gln Asn Gln Ala Lys Leu Tyr Asp Thr Ala Met Lys Leu Ile Asn Ser
 325 330 335
 Leu Leu Lys Glu Phe Ser Asp Ala Gln Ile Lys Val Phe Arg Pro Asp
 340 345 350
 Lys Gly Asn Gln Phe Pro Gly Gly Lys Val Ser Ser Val Pro Lys Val
 355 360 365
 Pro Pro Arg Tyr Lys Glu Pro Thr Thr Asp Glu Ala Pro Ser Ser Ile
 370 375 380
 Lys Ile Lys Ser Ala Asp Lys Met Pro Pro Met His Lys Met Met Arg
 385 390 395 400
 Lys Pro Ser Ser Asp Lys Ile Pro Ser Ile Asp Lys Thr Leu Val Asn
 405 410 415
 Lys Val Val His Ser Ser Val Cys Asn Ile Leu Asn Asp Tyr Gly Ser
 420 425 430
 Gln Asp Ser Ile Trp Lys Asn Ile Asn Ser Asn Gly Glu Asn Leu Ala
 435 440 445
 Arg Arg Leu Thr Ser Ala Val Ile Asn Glu Ile Phe Gln His Gln Val
 450 455 460
 Asn Leu Ile Phe Cys Asp Glu Val Ser Val Ser Ala Cys Leu Pro Leu
 465 470 475 480
 Glu Ser Lys Asp Val Val Lys Lys Val Gln Lys Leu Ala Gln Thr Ala
 485 490 495
 Ser Lys Glu Cys Gln Thr Ser Ser Pro Tyr Thr Ile Ile Leu Pro His
 500 505 510
 Lys Phe Leu Glu Asn Val Ile Ser Ala Leu Phe Ser Lys Ile Phe Ser
 515 520 525

Thr Ile Ser Ser Thr Lys Thr Lys Glu Pro Glu Asp Asn Leu Ser Thr
 530 535 540
 Glu Leu Asn Phe Leu Gln Met Lys Leu Val Ser Ala Val Ala Thr Glu
 545 550 555 560
 Ile Ser Gln Asp Lys Tyr Met Thr Ile Gln Tyr Val Glu Thr Leu Gln
 565 570 575
 Ser Asp Asp Asp Glu Ile Ile Gln Leu Val Val Gln Ser Val Tyr Asn
 580 585 590
 Asn Leu Leu Pro Gln Phe Gly Ser Gln Glu Ile Ile Gln Asn Cys Val
 595 600 605
 Thr Ser Gly Cys Lys Ile Leu Ser Glu Asn Ile Val Asp Leu Val Leu
 610 615 620
 Arg Glu Val Ala Ser Asn Gln Leu Gln Ser Tyr Phe Cys Gly Glu Leu
 625 630 635 640
 Thr Pro His Gln Cys Val Glu Val Glu Asn Ile Val Glu Lys Ile Leu
 645 650 655
 Lys Asp Val Phe Gln Thr Thr Asp Val Pro Gln Pro Lys Pro Ser His
 660 665 670
 Ala Asp Lys Leu Ser Tyr Asn Ile Ile Glu Glu Ile Ala Val Lys Phe
 675 680 685
 Leu Ser Lys Leu Leu Ser Ile Phe Pro Lys Val His Lys Glu Arg Thr
 690 695 700
 Lys Ser Leu Glu Thr Asp Met Gln Lys Ile Thr Ser Lys Val Leu Asn
 705 710 715 720
 Ser Val Gln Glu Phe Ile Ser Lys Ser Lys Ile Lys Leu Val Pro Pro
 725 730 735
 Thr Lys Glu Ser Pro Thr Val Pro Val Ala Asp Asn Ala Thr Ile Glu
 740 745 750
 Asn Ile Val Asn Ser Ile Tyr Thr Ser Val Leu Lys His Ser Gly Ser
 755 760 765
 Tyr Thr Ser Val Phe Lys Asp Leu Met Gly Lys Ser Asn Val Leu Ser
 770 775 780
 Asp Thr Ile Gly Phe Leu Met Val Asn Ala Ile Ser Asn Ser Glu Phe
 785 790 795 800
 Gln Pro Gln Val Glu Glu Glu Val Ser Asn Ser Glu Leu Val Leu Glu
 805 810 815

Ala Val Lys Ile Met Glu Lys Val Ile Lys Ile Ile Asp Glu Leu Lys
 820 825 830
 Ser Lys Glu Lys Ser Ser Ser Arg Lys Gly Leu Thr Leu Asp Ala Lys
 835 840 845
 Leu Leu Glu Glu Val Leu Ala Leu Phe Leu Ala Lys Leu Ile Arg Leu
 850 855 860
 Pro Ser Ser Ser Ser Lys Asp Glu Lys Asn Leu Ser Lys Thr Glu Leu
 865 870 875 880
 Asn Lys Ile Ala Ser Gln Leu Ser Lys Leu Val Thr Ala Glu Ile Ser
 885 890 895
 Arg Ser Ser Ile Ser Leu Ile Ala Ser Asp Pro Glu Glu His Cys Leu
 900 905 910
 Asn Pro Glu Asn Thr Glu Arg Ile Tyr Gln Val Val Asp Ser Val Tyr
 915 920 925
 Ser Asn Ile Leu Gln Gln Ser Gly Thr Asn Lys Glu Phe Tyr Tyr Asp
 930 935 940
 Ile Lys Asp Thr Asn Thr Ala Phe Pro Lys Lys Val Ala Ser Leu Ile
 945 950 955 960
 Ile Asp Gly Val Ser Ser Phe Pro Leu Asp Thr Ile Asn Ser Thr Phe
 965 970 975
 Lys Cys

<210> 3922

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3922

Met Leu Ser Ala Val Pro Leu Gly Pro Leu Leu Phe Leu Tyr Thr Leu
 1 5 10 15
 Ser Leu Cys Leu Ile Ser Phe Leu Ser Leu Ser Ser His Pro Thr Arg
 20 25 30
 Asn Thr His Ser Cys Gly Gly Glu Ser His Pro Phe Thr Phe Leu Phe
 35 40 45

Phe Ser Phe Phe Phe Leu Pro Ser Phe Phe Phe Leu Phe Phe Leu Phe
 50 55 60
 Phe Phe Phe Leu Thr Glu Ser Cys Ser Val Thr Gln Ala Gly Val Gln
 65 70 75 80
 Trp Arg Tyr Leu Gly Ser Leu Gln Pro Pro Pro Pro Arg Phe Lys Gln
 85 90 95
 Ser Ser Cys Leu Ser Leu Pro Ser Ile Trp Asn Tyr Arg Arg Val Pro
 100 105 110
 Pro Arg Pro Ala Ser Phe Cys Ile Ile Ser Arg Asp Gly Val Ser Pro
 115 120 125
 Cys Trp Pro Gly Trp Ser Arg Thr Pro Asp Leu Arg
 130 135 140

<210> 3923

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3923

Met Tyr Pro Glu Pro Ser Leu Phe Leu Tyr Cys Pro Ser Lys Met Ser
 1 5 10 15
 Val Gln Gly Pro Gly Val Glu Glu Pro Val Val Cys Trp Gly Arg Ile
 20 25 30
 Leu Gly Trp His Ser Leu Arg His Pro Thr Ser Thr Ser Pro Met Leu
 35 40 45
 Phe His Met Val Pro Gly Ser Ser Thr Val Thr Ser Thr Leu Glu Met
 50 55 60
 Ala Thr Val Thr Cys Pro Ser His Arg Glu Thr Lys His Ser Pro Cys
 65 70 75 80
 Leu Pro Asp Ser Gly Val Cys Leu Leu Ser Phe Tyr His His Leu Pro
 85 90 95
 Pro Val Glu Gly Phe Leu Arg Asn Asp Leu Pro Gly Glu Asn Pro Phe
 100 105 110
 Ile Pro Arg Pro Pro Ser His Pro Ile Ile Gln Cys Ile Leu

115

120

125

<210> 3924

<211> 926

<212> PRT

<213> Homo sapiens

<400> 3924

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Met His Phe Arg Asp Thr Ser Glu Arg Gln Ser Asp Ala Val Asn Glu
  1             5             10            15
Ser Ser Leu Asp Ser Val His Leu Gln Met Ile Lys Gly Met Leu Tyr
      20             25            30
Gln Gln Arg Gln Asp Phe Ser Ser Gln Asp Ser Val Ser Arg Lys Lys
      35             40            45
Val Leu Ser Leu Asn Leu Lys Gln Thr Ser Lys Thr Glu Glu Ile Lys
      50             55            60
Asn Val Leu Gly Gly Ser Thr Cys Tyr Asn Tyr Ser Val Lys Asp Leu
      65             70            75            80
Gln Glu Ile Ser Gly Ser Glu Leu Cys Phe Pro Ser Gly Gln Lys Ile
      85             90            95
Lys Ser Ala Tyr Leu Pro Gln Arg Gln Ile His Ile Pro Ala Val Phe
      100            105            110
Gln Ser Pro Ala His Tyr Lys Gln Thr Phe Thr Ser Cys Leu Ile Glu
      115            120            125
His Leu Asn Ile Leu Leu Phe Gly Leu Ala Gln Asn Leu Gln Lys Ala
      130            135            140
Leu Ser Lys Val Asp Ile Ser Phe Tyr Thr Ser Leu Lys Gly Glu Lys
      145            150            155            160
Leu Lys Asn Ala Glu Asn Asn Val Pro Ser Cys His His Ser Gln Pro
      165            170            175
Ala Lys Leu Val Met Val Lys Lys Glu Gly Pro Asn Lys Gly Arg Leu
      180            185            190
Phe Tyr Thr Cys Asp Gly Pro Lys Ala Asp Arg Cys Lys Phe Phe Lys
      195            200            205
Trp Leu Glu Asp Val Thr Pro Gly Tyr Ser Thr Gln Glu Gly Ala Arg

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210	215	220
Pro Gly Met Val Leu Ser Asp Ile Lys Ser Ile Gly Leu Tyr Leu Arg		
225	230	235
Ser Gln Lys Ile Pro Leu Tyr Glu Glu Cys Gln Leu Leu Val Arg Lys		
245	250	255
Gly Phe Asp Phe Gln Arg Lys Gln Tyr Gly Lys Leu Lys Lys Phe Thr		
260	265	270
Thr Val Asn Pro Glu Phe Tyr Asn Glu Pro Lys Thr Lys Leu Tyr Leu		
275	280	285
Lys Leu Ser Arg Lys Glu Arg Ser Ser Ala Tyr Ser Lys Asn Asp Leu		
290	295	300
Trp Val Val Ser Lys Thr Leu Asp Phe Glu Leu Asp Thr Phe Ile Ala		
305	310	315
Cys Ser Ala Phe Phe Gly Pro Ser Ser Ile Asn Glu Ile Glu Ile Leu		
325	330	335
Pro Leu Lys Gly Tyr Phe Pro Ser Asn Trp Pro Thr Asn Met Val Val		
340	345	350
His Ala Leu Leu Val Cys Asn Ala Ser Thr Glu Leu Thr Thr Leu Lys		
355	360	365
Asn Ile Gln Asp Tyr Phe Asn Pro Ala Thr Leu Pro Leu Thr Gln Tyr		
370	375	380
Leu Leu Thr Thr Ser Ser Pro Thr Ile Val Ser Asn Lys Arg Val Ser		
385	390	395
Lys Arg Lys Phe Ile Pro Pro Ala Phe Thr Asn Val Ser Thr Lys Phe		
405	410	415
Glu Leu Leu Ser Leu Gly Ala Thr Leu Lys Leu Ala Ser Glu Leu Ile		
420	425	430
Gln Val His Lys Leu Asn Lys Asp Gln Ala Thr Ala Leu Ile Gln Ile		
435	440	445
Ala Gln Met Met Ala Ser His Glu Ser Ile Glu Glu Val Lys Glu Leu		
450	455	460
Gln Thr His Thr Phe Pro Ile Thr Ile Ile His Gly Val Phe Gly Ala		
465	470	475
Gly Lys Ser Tyr Leu Leu Ala Val Val Ile Leu Phe Phe Val Gln Leu		
485	490	495
Phe Glu Lys Ser Glu Ala Pro Thr Ile Gly Asn Ala Arg Pro Trp Lys		

500	505	510
Leu Leu Ile Ser Ser Ser Thr Asn Val Ala Val Asp Arg Val Leu Leu		
515	520	525
Gly Leu Leu Ser Leu Gly Phe Glu Asn Phe Ile Arg Val Gly Ser Val		
530	535	540
Arg Lys Ile Ala Lys Pro Ile Leu Pro Tyr Ser Leu His Ala Gly Ser		
545	550	555
Glu Asn Glu Ser Glu Gln Leu Lys Glu Leu His Ala Leu Met Lys Glu		
565	570	575
Asp Leu Thr Pro Thr Glu Arg Val Tyr Val Arg Lys Ser Ile Glu Gln		
580	585	590
His Lys Leu Gly Thr Asn Arg Thr Leu Leu Lys Gln Val Arg Val Val		
595	600	605
Gly Val Thr Cys Ala Ala Cys Pro Phe Pro Cys Met Asn Asp Leu Lys		
610	615	620
Phe Pro Val Val Val Leu Asp Glu Cys Ser Gln Ile Thr Glu Pro Ala		
625	630	635
Ser Leu Leu Pro Ile Ala Arg Phe Glu Cys Glu Lys Leu Ile Leu Val		
645	650	655
Gly Asp Pro Lys Gln Leu Pro Pro Thr Ile Gln Gly Ser Asp Ala Ala		
660	665	670
His Glu Asn Gly Leu Glu Gln Thr Leu Phe Asp Arg Leu Cys Leu Met		
675	680	685
Gly His Lys Pro Ile Leu Leu Arg Thr Gln Tyr Arg Cys His Pro Ala		
690	695	700
Ile Ser Ala Ile Ala Asn Asp Leu Phe Tyr Lys Gly Ala Leu Met Asn		
705	710	715
Gly Val Thr Glu Ile Glu Arg Ser Pro Leu Leu Glu Trp Leu Pro Thr		
725	730	735
Leu Cys Phe Tyr Asn Val Lys Gly Leu Glu Gln Ile Glu Arg Asp Asn		
740	745	750
Ser Phe His Asn Val Ala Glu Ala Thr Phe Thr Leu Lys Leu Ile Gln		
755	760	765
Ser Leu Ile Ala Ser Gly Ile Ala Gly Ser Met Ile Gly Val Ile Thr		
770	775	780
Leu Tyr Lys Ser Gln Met Tyr Lys Leu Cys His Leu Leu Ser Ala Val		

785 790 795 800
 Asp Phe His His Pro Asp Ile Lys Thr Val Gln Val Ser Thr Val Asp
 805 810 815
 Ala Phe Gln Gly Ala Glu Lys Glu Ile Ile Ile Leu Ser Cys Val Arg
 820 825 830
 Thr Arg Gln Val Gly Phe Ile Asp Ser Glu Lys Arg Met Asn Val Ala
 835 840 845
 Leu Thr Arg Gly Lys Arg His Leu Leu Ile Val Gly Asn Leu Ala Cys
 850 855 860
 Leu Arg Lys Asn Gln Leu Trp Gly Arg Val Ile Gln His Cys Glu Gly
 865 870 875 880
 Arg Glu Asp Gly Leu Gln His Ala Asn Gln Tyr Glu Pro Gln Leu Asn
 885 890 895
 His Leu Leu Lys Asp Tyr Phe Glu Lys Gln Val Glu Glu Lys Gln Lys
 900 905 910
 Lys Lys Ser Glu Lys Glu Lys Ser Lys Asp Lys Ser His Ser
 915 920 925

<210> 3925

<211> 1058

<212> PRT

<213> Homo sapiens

<400> 3925

Met Ile Ile Cys Leu Leu Met Thr Leu Lys Leu Arg Tyr Leu Pro Thr
 1 5 10 15
 Lys Val Leu Gln Leu Glu Ser Cys Leu Glu His Lys Ser Arg Ser Ser
 20 25 30
 Pro Ile Ala Leu Ile Asp Glu Lys Ser Thr Asn Ala His Leu Ser Leu
 35 40 45
 Pro Gln Lys Ser Pro Ser Leu Ala Lys Glu Val Pro Asp Leu Cys Phe
 50 55 60
 Ser Asp Asp Tyr Phe Ser Asp Lys Gly Ala Ala Lys Glu Glu Lys Pro
 65 70 75 80
 Lys Asn Asp Gln Glu Pro Val Asn Arg Ile Ile Gln Lys Lys Glu Asn

	85		90		95
Asn Asp His Phe Glu Leu Asp Cys Thr Gly Pro Ser Ile Lys Ser Pro					
	100		105		110
Ser Ser Ser Ile Ile Lys Lys Ala Ser Phe Glu His Gly Lys Lys Gln					
	115		120		125
Glu Asn Asp Leu Asp Leu Leu Ser Asp Phe Ile Met Leu Arg Asn Lys					
	130		135		140
Tyr Lys Thr Cys Thr Ser Lys Thr Glu Val Thr Asn Ser Asp Glu Lys					
145		150		155	160
His Asp Lys Glu Ala Cys Ser Leu Thr Leu Gln Glu Glu Ser Pro Ile					
	165		170		175
Val His Ile Asn Lys Thr Leu Glu Glu Ile Asn Gln Glu Arg Gly Thr					
	180		185		190
Asp Ser Val Ile Glu Ile Gln Ala Ser Asp Ser Gln Cys Gln Ala Phe					
	195		200		205
Cys Leu Leu Glu Ala Ala Ala Ser Pro Ile Leu Lys Asn Leu Val Ser					
	210		215		220
Leu Cys Thr Leu Pro Thr Ala Asn Trp Lys Phe Ala Thr Val Ile Phe					
225		230		235	240
Asp Gln Thr Arg Phe Leu Leu Lys Glu Gln Glu Lys Val Val Ser Asp					
	245		250		255
Ala Val Arg Gln Gly Thr Ile Asp Glu Arg Glu Met Thr Phe Lys His					
	260		265		270
Ala Ala Leu Leu His Leu Leu Val Thr Ile Arg Asp Val Leu Leu Thr					
	275		280		285
Cys Ser Leu Asp Thr Ala Leu Gly Tyr Leu Ser Lys Ala Lys Asp Ile					
	290		295		300
Tyr Asn Ser Ile Leu Gly Pro Tyr Leu Gly Asp Ile Trp Arg Gln Leu					
305		310		315	320
Glu Ile Val Gln Phe Ile Arg Gly Lys Lys Pro Glu Thr Asn Tyr Lys					
	325		330		335
Ile Gln Glu Leu Gln Cys Gln Ile Leu Ser Trp Met Gln Ser Gln Gln					
	340		345		350
Gln Ile Lys Val Leu Ile Ile Ile Arg Met Asp Ser Asp Gly Glu Lys					
	355		360		365
His Phe Leu Ile Lys Ile Leu Asn Lys Ile Glu Gly Leu Thr Leu Thr					

370	375	380	
Val Leu His Ser Asn Glu Arg Lys Asp Phe Leu Glu Ser Glu Gly Val			
385	390	395	400
Leu Arg Gly Thr Ser Ser Cys Val Val Val His Asn Gln Tyr Ile Gly			
	405	410	415
Ala Asp Phe Pro Trp Ser Asn Phe Ser Phe Val Val Glu Tyr Asn Tyr			
	420	425	430
Val Glu Asp Ser Cys Trp Thr Lys His Cys Lys Glu Leu Asn Ile Pro			
	435	440	445
Tyr Met Ala Phe Lys Val Ile Leu Pro Asp Thr Val Leu Glu Arg Ser			
	450	455	460
Thr Leu Leu Asp Arg Phe Gly Gly Phe Leu Leu Glu Ile Gln Ile Pro			
465	470	475	480
Tyr Val Phe Phe Ala Ser Glu Gly Leu Leu Asn Thr Pro Asp Ile Leu			
	485	490	495
Gln Leu Leu Glu Ser Asn Tyr Asn Ile Ser Leu Val Glu Arg Gly Cys			
	500	505	510
Ser Glu Ser Leu Lys Leu Phe Gly Ser Ser Glu Cys Tyr Val Val Val			
	515	520	525
Thr Ile Asp Glu His Thr Ala Ile Ile Leu Gln Asp Leu Glu Glu Leu			
	530	535	540
Asn Cys Glu Lys Ala Ser Asp Asn Ile Ile Met Arg Leu Met Ala Leu			
545	550	555	560
Ser Leu Gln Tyr Arg Tyr Cys Trp Ile Ile Leu Tyr Thr Lys Glu Thr			
	565	570	575
Leu Asn Ser Glu Tyr Pro Leu Thr Glu Lys Thr Leu His His Leu Ala			
	580	585	590
Leu Ile Tyr Ala Ala Leu Val Ser Phe Gly Leu Asn Ser Glu Glu Leu			
	595	600	605
Asp Val Lys Leu Ile Ile Ala Pro Gly Val Glu Ala Thr Ala Leu Ile			
	610	615	620
Ile Arg Gln Ile Ala Asp His Ser Leu Met Thr Ser Lys Arg Asp Pro			
625	630	635	640
His Glu Trp Leu Asp Lys Ser Trp Leu Lys Val Ser Pro Ser Glu Glu			
	645	650	655
Glu Met Tyr Leu Leu Asp Phe Pro Cys Ile Asn Pro Leu Val Ala Gln			

660	665	670
Leu Met Leu Asn Lys Gly Pro Ser	Leu His Trp Ile Leu Leu Ala Thr	
675	680	685
Leu Cys Gln Leu Gln Glu Leu Leu Pro Glu Val Pro Glu Lys Val Leu		
690	695	700
Lys His Phe Cys Ser Ile Thr Ser Leu Phe Lys Ile Gly Ser Ser Ser		
705	710	715
Ile Thr Lys Ser Pro Gln Ile Ser Ser Pro Gln Glu Asn Arg Asn Gln		
725	730	735
Ile Ser Thr Leu Ser Ser Gln Ser Ser Ala Ser Asp Leu Asp Ser Val		
740	745	750
Ile Gln Glu His Asn Glu Tyr Tyr Gln Tyr Leu Gly Leu Gly Glu Thr		
755	760	765
Val Gln Glu Asp Lys Thr Thr Thr Leu Asn Asp Asn Ser Ser Ile Met		
770	775	780
Glu Leu Lys Gly Ile Ser Ser Phe Leu Pro Pro Val Thr Ser Tyr Asn		
785	790	795
Gln Thr Ser Tyr Trp Lys Asp Ser Ser Cys Lys Ser Asn Ile Gly Gln		
805	810	815
Asn Thr Pro Phe Leu Ile Asn Ile Glu Ser Arg Arg Pro Ala Tyr Asn		
820	825	830
Ser Phe Leu Asn His Ser Asp Ser Glu Ser Asp Val Phe Ser Leu Gly		
835	840	845
Leu Thr Gln Met Asn Cys Glu Thr Ile Lys Ser Pro Thr Asp Thr Gln		
850	855	860
Lys Arg Val Ser Val Val Pro Arg Phe Ile Asn Ser Gln Lys Arg Arg		
865	870	875
Thr His Glu Ala Lys Gly Phe Ile Asn Lys Asp Val Ser Asp Pro Ile		
885	890	895
Phe Ser Leu Glu Gly Thr Gln Ser Pro Leu His Trp Asn Phe Lys Lys		
900	905	910
Asn Ile Trp Glu Gln Glu Asn His Pro Phe Asn Leu Gln Tyr Gly Ala		
915	920	925
Gln Gln Thr Ala Cys Asn Lys Leu Tyr Ser Gln Lys Gly Asn Leu Phe		
930	935	940
Thr Asp Gln Gln Lys Cys Leu Ser Asp Glu Ser Glu Gly Leu Thr Cys		

945 950 955 960
 Glu Ser Ser Lys Asp Glu Thr Phe Trp Arg Glu Leu Pro Ser Val Pro
 965 970 975
 Ser Leu Asp Leu Phe Arg Ala Ser Asp Ser Asn Ala Asn Gln Lys Glu
 980 985 990
 Phe Asn Ser Leu Tyr Phe Tyr Gln Arg Ala Gly Lys Ser Leu Gly Gln
 995 1000 1005
 Lys Arg His His Glu Ser Ser Phe Asn Ser Gly Asp Lys Glu Ser Leu
 1010 1015 1020
 Thr Gly Phe Met Cys Ser Gln Leu Pro Gln Phe Lys Lys Arg Arg Leu
 1025 1030 1035 1040
 Ala Tyr Glu Lys Val Pro Gly Arg Val Asp Gly Gln Thr Arg Leu Arg
 1045 1050 1055
 Phe Phe

<210> 3926

<211> 539

<212> PRT

<213> Homo sapiens

<400> 3926

Met Pro Gly Gln Arg Arg Ala Leu Ser Pro Lys Met Ala Ser Met Arg
 1 5 10 15
 Glu Ser Asp Thr Gly Leu Trp Leu His Asn Lys Leu Gly Ala Thr Asp
 20 25 30
 Glu Leu Trp Ala Pro Pro Ser Ile Ala Ser Leu Leu Thr Ala Ala Val
 35 40 45
 Ile Asp Asn Ile Arg Leu Cys Phe His Gly Leu Ser Ser Ala Val Lys
 50 55 60
 Leu Lys Leu Leu Leu Gly Thr Leu His Leu Pro Arg Arg Thr Val Asp
 65 70 75 80
 Glu Met Lys Gly Ala Leu Met Glu Ile Ile Gln Leu Ala Ser Leu Asp
 85 90 95
 Ser Asp Pro Trp Val Leu Met Val Ala Asp Ile Leu Lys Ser Phe Pro

100	105	110
Asp Thr Gly Ser Leu Asn Leu Glu Leu Glu Glu Gln Asn Pro Asn Val		
115	120	125
Gln Asp Ile Leu Gly Glu Leu Arg Glu Lys Val Gly Glu Cys Glu Ala		
130	135	140
Ser Ala Met Leu Pro Leu Glu Cys Gln Tyr Leu Asn Lys Asn Ala Leu		
145	150	155
Thr Thr Leu Ala Gly Pro Leu Thr Pro Pro Val Lys His Phe Gln Leu		
165	170	175
Lys Arg Lys Pro Lys Ser Ala Thr Leu Arg Ala Glu Leu Leu Gln Lys		
180	185	190
Ser Thr Glu Thr Ala Gln Gln Leu Lys Arg Ser Ala Gly Val Pro Phe		
195	200	205
His Ala Lys Gly Arg Gly Leu Leu Arg Lys Met Asp Thr Thr Thr Pro		
210	215	220
Leu Lys Gly Ile Pro Lys Gln Ala Pro Phe Arg Ser Pro Thr Ala Pro		
225	230	235
Ser Val Phe Ser Pro Thr Gly Asn Arg Thr Pro Ile Pro Pro Ser Arg		
245	250	255
Thr Leu Leu Arg Lys Glu Arg Gly Val Lys Leu Leu Asp Ile Ser Glu		
260	265	270
Leu Asp Met Val Gly Ala Gly Arg Glu Ala Lys Arg Arg Arg Lys Thr		
275	280	285
Leu Asp Ala Glu Val Val Glu Lys Pro Ala Lys Glu Glu Thr Val Val		
290	295	300
Glu Asn Ala Thr Pro Asp Tyr Ala Ala Gly Leu Val Ser Thr Gln Lys		
305	310	315
Leu Gly Ser Leu Asn Asn Glu Pro Ala Leu Pro Ser Thr Ser Tyr Leu		
325	330	335
Pro Ser Thr Pro Ser Val Val Pro Ala Ser Ser Tyr Ile Pro Ser Ser		
340	345	350
Glu Thr Pro Pro Ala Pro Ser Ser Arg Glu Ala Ser Arg Pro Pro Glu		
355	360	365
Glu Pro Ser Ala Pro Ser Pro Thr Leu Pro Ala Gln Phe Lys Gln Arg		
370	375	380

Ile Leu Lys Ala Glu Ile Ser Thr Thr Arg Leu Arg Val Lys Glu Leu
 65 70 75 80
 Lys Arg Glu Leu Ser Gln Met Lys Gln Glu Leu Leu Tyr Lys Glu Gln
 85 90 95
 Gly Phe Glu Thr Leu Gln Gln Ile Asp Lys Lys Met Ser Gly Gly Gln
 100 105 110
 Ser Gly Tyr Glu Leu Ser Glu Ala Lys Ala Ile Leu Thr Glu Leu Lys
 115 120 125
 Ser Ile Arg Lys Ala Ile Ser Ser Gly Glu Lys Glu Lys Gln Asp Leu
 130 135 140
 Met Gln Ser Leu Ala Lys Leu Gln Glu Arg Phe His Leu Asp Gln Asn
 145 150 155 160
 Ile Gly Arg Ser Glu Pro Asp Leu Arg Cys Ser Pro Val Asn Ser His
 165 170 175
 Leu Cys Leu Ser Arg Gln Thr Leu Asp Ala Gly Ser Gln Thr Ser Ile
 180 185 190
 Ser Gly Asp Ile Gly Val Arg Ser Arg Ser Asn Leu Ala Glu Lys Val
 195 200 205
 Arg Leu Ser Leu Gln Tyr Glu Glu Ala Lys Arg Ser Met Ala Asn Leu
 210 215 220
 Lys Ile Glu Leu Ser Lys Leu Asp Ser Glu Ala Trp Pro Gly Ala Leu
 225 230 235 240
 Asp Ile Glu Lys Glu Lys Leu Met Leu Ile Asn Glu Lys Glu Glu Leu
 245 250 255
 Leu Lys Glu Leu Gln Phe Val Thr Pro Gln Lys Arg Thr Gln Asp Glu
 260 265 270
 Leu Glu Arg Leu Glu Ala Glu Arg Gln Arg Leu Glu Glu Glu Leu Leu
 275 280 285
 Ser Val Arg Gly Thr Pro Ser Arg Ala Leu Ala Glu Arg Leu Arg Leu
 290 295 300
 Glu Glu Arg Arg Lys Glu Leu Leu Gln Lys Leu Glu Glu Thr Thr Lys
 305 310 315 320
 Leu Thr Thr Tyr Leu His Ser Gln Leu Lys Ser Leu Ser Ala Ser Thr
 325 330 335
 Leu Ser Met Ser Ser Gly Ser Ser Leu Gly Ser Leu Ala Ser Ser Arg
 340 345 350

Gly Ser Leu Asn Thr Ser Ser Arg Gly Ser Leu Asn Ser Leu Ser Ser
 355 360 365
 Thr Glu Leu Tyr Tyr Ser Ser Gln Ser Asp Gln Ile Asp Val Asp Tyr
 370 375 380
 Gln Tyr Lys Leu Asp Phe Leu Leu Gln Glu Lys Ser Gly Tyr Ile Pro
 385 390 395 400
 Ser Gly Pro Ile Thr Thr Ile His Glu Asn Glu Val Val Lys Ser Pro
 405 410 415
 Ser Gln Pro Gly Gln Ser Gly Leu Cys Gly Val Ala Ala Ala Ala Thr
 420 425 430
 Gly His Thr Pro Pro Leu Ala Glu Ala Pro Lys Ser Val Ala Ser Leu
 435 440 445
 Ser Ser Arg Ser Ser Leu Ser Ser Leu Ser Pro Pro Gly Ser Pro Leu
 450 455 460
 Val Leu Glu Gly Thr Phe Pro Met Ser Ser Ser His Asp Ala Ser Leu
 465 470 475 480
 His Gln Phe Thr Ala Asp Phe Glu Asp Cys Glu Leu Ser Ser His Phe
 485 490 495
 Ala Asp Ile Ser Leu Ile Glu Asn Gln Ile Leu Leu Asp Ser Asp Ser
 500 505 510
 Gly Gly Ala Ser Gln Ser Leu Ser Glu Asp Lys Asp Leu Asn Glu Cys
 515 520 525
 Ala Arg Glu Pro Leu Tyr Glu Gly Thr Ala Asp Val Glu Lys Ser Leu
 530 535 540
 Pro Lys Arg Arg Val Ile His Leu Leu Gly Glu Lys Thr Thr Cys Val
 545 550 555 560
 Ser Ala Ala Val Ser Asp Glu Ser Val Ala Gly Asp Ser Gly Val Tyr
 565 570 575
 Glu Ala Phe Val Lys Gln Pro Ser Glu Met Glu Asp Val Thr Tyr Ser
 580 585 590
 Glu Glu Asp Val Ala Ile Val Glu Thr Ala Gln Val Gln Ile Gly Leu
 595 600 605
 Arg Tyr Asn Ala Lys Ser Ser Ser Phe Met Val Ile Ile Ala Gln Leu
 610 615 620
 Arg Asn Leu His Ala Phe Leu Ile Pro His Thr Ser Lys Val Tyr Phe
 625 630 635 640

Arg Val Ala Val Leu Pro Ser Ser Thr Asp Val Ser Cys Leu Phe Arg
 645 650 655
 Thr Lys Val His Pro Pro Thr Glu Ser Ile Leu Phe Asn Asp Val Phe
 660 665 670
 Arg Val Ala Ile Ser Gln Thr Ala Leu Gln Gln Lys Thr Leu Arg Lys
 675 680 685
 Asn Phe Thr Phe Val Thr Ala Ile Thr His Gly Val Cys Leu Pro Leu
 690 695 700
 Pro Val Pro Met Pro Ser Phe Ala
 705 710

<210> 3928

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3928

Met Gly Ser His Tyr Val Ala Gln Val Gly Val Gln Trp Leu Phe Ile
 1 5 10 15
 Gly Met Val Ile Val His Cys Ser Leu Glu Leu Val Ala Ser Ser Asp
 20 25 30
 Arg Pro Ala Ser Ala Ser Arg Val Ala Arg Thr Ile Tyr Ala His Pro
 35 40 45
 Phe Ala Trp Leu Lys Leu Tyr Ser Phe Cys Ser Tyr Pro His Pro Cys
 50 55 60
 Val Phe Ile Ser Arg Lys Ser Thr Ile Ser Phe Ile His Met Gly Leu
 65 70 75 80
 Thr Ile Ser Tyr His Gln Ser Ser Gly Val Met Asn Gly Met Leu Leu
 85 90 95
 Phe Tyr Leu Tyr
 100

<210> 3929

<211> 933

<212> PRT

<213> Homo sapiens

<400> 3929

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Met Ser Cys Ser Leu Leu Pro Ala Leu Pro Leu Val Pro Pro Gly Thr
  1             5             10             15
His Asn Pro Ile Lys Thr Asn Trp Met Ala Trp His Gly Gly Ser Cys
      20             25             30
Leu Ser Ser Gln His Tyr Gly Gly Pro Arg Arg Val Asp His Leu Arg
      35             40             45
Ser Gly Val Gln Asp Gln Pro Asp Gln His Gly Glu Thr Leu Ser Val
      50             55             60
Leu Lys Ile Lys Lys Lys Leu Ala Arg Cys Gly Gly Val Arg Leu Gly
      65             70             75             80
Arg Leu Arg Gln Glu Asn Arg Leu Asn Thr Ala Thr Ser Leu Thr Ala
      85             90             95
Glu Gly Ala Val Ser Gln Asp His Ala Thr Ala Leu Gln Pro Gly Arg
      100            105            110
Gln Ser Lys Thr Leu Ser Gln Arg Asn Lys Thr Asn Trp Arg Pro Pro
      115            120            125
Gln Val Ala Gly Ser Gly Glu Gly Leu His Leu Cys Thr Pro Pro Trp
      130            135            140
Leu Ser Val Ala Asp Pro Gln Ala Phe Asn Val Val Phe Glu Lys Ala
      145            150            155            160
Ile Gln Arg Thr Thr Pro Ala Asn Glu Val Lys Gln Arg Val Ile Asn
      165            170            175
Leu Thr Asp Glu Ile Thr Tyr Ser Val Tyr Met Tyr Thr Ala Arg Gly
      180            185            190
Leu Phe Glu Arg Asp Lys Leu Ile Phe Leu Ala Gln Val Thr Phe Gln
      195            200            205
Val Leu Ser Met Lys Lys Glu Leu Asn Pro Val Glu Leu Asp Phe Leu
      210            215            220
Leu Arg Phe Pro Phe Lys Ala Gly Val Val Ser Pro Val Asp Phe Leu
      225            230            235            240
Gln His Gln Gly Trp Gly Gly Ile Lys Ala Leu Ser Glu Met Asp Glu
      245            250            255

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Phe Lys Asn Leu Asp Ser Asp Ile Glu Gly Ser Ala Lys Arg Trp Lys
 260 265 270
 Lys Leu Val Glu Ser Glu Ala Pro Glu Lys Glu Ile Phe Pro Lys Glu
 275 280 285
 Trp Lys Asn Lys Thr Ala Leu Gln Lys Leu Cys Met Val Arg Cys Leu
 290 295 300
 Arg Pro Asp Arg Met Thr Tyr Ala Ile Lys Asn Phe Val Glu Glu Lys
 305 310 315 320
 Met Gly Ser Lys Phe Val Glu Gly Arg Ser Val Glu Phe Ser Lys Ser
 325 330 335
 Tyr Glu Glu Ser Ser Pro Ser Thr Ser Ile Phe Phe Ile Leu Ser Pro
 340 345 350
 Gly Val Asp Pro Leu Lys Asp Val Glu Ala Leu Gly Lys Lys Leu Gly
 355 360 365
 Phe Thr Ile Asp Asn Gly Lys Leu His Asn Val Ser Leu Gly Gln Gly
 370 375 380
 Gln Glu Val Val Ala Glu Asn Ala Leu Asp Val Ala Ala Glu Lys Gly
 385 390 395 400
 His Trp Val Ile Leu Gln Asn Ile His Leu Val Ala Arg Trp Leu Gly
 405 410 415
 Thr Leu Asp Lys Lys Leu Glu Arg Tyr Ser Thr Gly Ser His Glu Asp
 420 425 430
 Tyr Arg Val Phe Ile Ser Ala Glu Pro Ala Pro Ser Pro Glu Thr His
 435 440 445
 Ile Ile Pro Gln Gly Ile Leu Glu Asn Ala Ile Lys Ile Thr Asn Glu
 450 455 460
 Pro Pro Thr Gly Met His Ala Asn Leu His Lys Ala Leu Asp Leu Phe
 465 470 475 480
 Thr Gln Asp Thr Leu Glu Met Cys Thr Lys Glu Met Glu Phe Lys Cys
 485 490 495
 Met Leu Phe Ala Leu Cys Tyr Phe His Ala Val Val Ala Glu Arg Arg
 500 505 510
 Lys Phe Gly Ala Gln Gly Trp Asn Arg Ser Tyr Pro Phe Asn Asn Gly
 515 520 525
 Asp Leu Thr Ile Ser Ile Asn Val Leu Tyr Asn Tyr Leu Glu Ala Asn
 530 535 540

Pro Lys Val Pro Trp Asp Asp Leu Arg Tyr Leu Phe Gly Glu Ile Met
 545 550 555 560
 Tyr Gly Gly His Ile Thr Asp Asp Trp Asp Arg Arg Leu Cys Arg Thr
 565 570 575
 Tyr Leu Ala Glu Tyr Ile Arg Thr Glu Met Leu Glu Gly Asp Val Leu
 580 585 590
 Leu Ala Pro Gly Phe Gln Ile Pro Pro Asn Leu Asp Tyr Lys Gly Tyr
 595 600 605
 His Glu Tyr Ile Asp Glu Asn Leu Pro Pro Glu Ser Pro Tyr Leu Tyr
 610 615 620
 Gly Leu His Pro Asn Ala Glu Ile Gly Phe Leu Thr Val Thr Ser Glu
 625 630 635 640
 Lys Leu Phe Arg Thr Val Leu Glu Met Gln Pro Lys Glu Thr Asp Ser
 645 650 655
 Gly Ala Gly Thr Gly Val Ser Arg Glu Glu Lys Val Lys Ala Val Leu
 660 665 670
 Asp Asp Ile Leu Glu Lys Ile Pro Glu Thr Phe Asn Met Ala Glu Ile
 675 680 685
 Met Ala Lys Ala Ala Glu Lys Thr Pro Tyr Val Val Val Ala Phe Gln
 690 695 700
 Glu Cys Glu Arg Met Asn Ile Leu Thr Asn Glu Met Arg Arg Ser Leu
 705 710 715 720
 Lys Glu Leu Asn Leu Gly Leu Lys Gly Glu Leu Thr Ile Thr Thr Asp
 725 730 735
 Val Glu Asp Leu Ser Thr Ala Leu Phe Tyr Asp Thr Val Pro Asp Thr
 740 745 750
 Trp Val Ala Arg Ala Tyr Pro Ser Met Met Gly Leu Ala Ala Trp Tyr
 755 760 765
 Ala Asp Leu Leu Leu Arg Ile Arg Glu Leu Glu Ala Trp Thr Thr Asp
 770 775 780
 Phe Ala Leu Pro Thr Thr Val Trp Leu Ala Gly Phe Phe Asn Pro Gln
 785 790 795 800
 Ser Phe Leu Thr Ala Ile Met Gln Ser Met Ala Arg Lys Asn Glu Trp
 805 810 815
 Pro Leu Asp Lys Met Cys Leu Ser Val Glu Val Thr Lys Lys Asn Arg
 820 825 830

Glu Asp Met Thr Ala Pro Pro Arg Glu Gly Ser Tyr Val Tyr Gly Leu
 835 840 845

Phe Met Glu Gly Ala Arg Trp Asp Thr Gln Thr Gly Val Ile Ala Glu

850 855 860
 Ala Arg Leu Lys Glu Leu Thr Pro Ala Met Pro Val Ile Phe Ile Lys
 865 870 875 880

Ala Ile Pro Val Asp Arg Met Glu Thr Lys Asn Ile Tyr Glu Cys Pro
 885 890 895

Val Tyr Lys Thr Arg Ile Arg Gly Pro Thr Tyr Val Trp Thr Phe Asn
 900 905 910

Leu Lys Thr Lys Glu Lys Ala Ala Lys Trp Ile Leu Ala Ala Val Ala
 915 920 925

Leu Leu Leu Gln Val
 930

<210> 3930

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3930

Met Glu Ser Arg Ser Val Ala Gln Ala Gly Val Gln Trp Asp Asn Phe
 1 5 10 15

Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Glu Arg Phe Ser Cys Leu
 20 25 30

Ser Leu Pro Ser Ser Trp Asp Cys Met Arg Pro Pro Pro His Leu Ala

35 40 45
 Asn Phe Cys Ile Phe Ser Gly Asp Gly Val Ser Pro Arg Trp Pro Gly
 50 55 60

Arg Tyr Arg Thr Pro Asp Leu Arg Arg Ser Thr Arg Leu Gly Leu Pro
 65 70 75 80

Arg Cys Trp Asp Tyr Arg Arg Glu Thr Gln Arg Leu Ala Cys Pro Phe
 85 90 95

Tyr Val Leu Pro Ser Phe Leu Phe Phe Ser Phe Leu
 100 105

<210> 3931

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3931

Met Ser Arg Gly Cys Ser Ser Asp Leu Arg Phe His Thr Trp Leu Gly
 1 5 10 15
 Leu Arg Met Leu Lys Asn Ile Ile Ala Val Ala Leu Leu Met Leu Gly
 20 25 30
 Lys Asn Glu Lys Glu Ala Pro Ala Pro Pro Met Glu Pro Glu Val Pro
 35 40 45
 Glu Met Ser Gln Ser Lys Thr Glu His Met Lys Thr Pro Glu Glu Glu
 50 55 60
 Leu Gln Pro Glu Ser Ser Pro Ala Glu Thr Ser Ala Cys Lys Asp Pro
 65 70 75 80
 Leu Lys Pro Leu Lys Ile Arg Pro Val Ser Gln Pro Phe Val Asn Pro
 85 90 95
 Ala Val Lys Asn Lys Ala Glu Glu Cys Glu Thr Trp Ile Asp Arg Phe
 100 105 110
 Arg Lys Leu Glu Asn Ala Leu Tyr Leu Cys Asp Leu Ser Asn Thr Gly
 115 120 125
 Val Leu Glu Lys Glu Arg Ala Arg Arg Leu Ile His Asn Tyr Asn Leu
 130 135 140
 Ile Tyr Asn Leu Ser Leu Ser Pro Gln Lys Ile Asp Gln Ala Leu Arg
 145 150 155 160
 Arg Phe Arg Ser Gly Glu Asn Met Leu Leu Glu Pro Ala Leu Arg Tyr
 165 170 175
 Leu Lys Glu Leu
 180

<210> 3932

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3932

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Met Lys Trp Gln Arg Met Leu Cys Val His Gln Ile Pro Ser Cys Leu
  1                   5                   10                   15
Pro Glu Tyr Ser Asp Tyr Asn Ser Gln Ser Pro Leu Tyr Leu Asp Gly
                   20                   25                   30
Ala Val Glu Leu Phe Cys Gly Leu Cys Ser Val Gly Gly Ser Gly Ile
                   35                   40                   45
Asn Leu Leu Cys Ser Pro Asn Ser Leu Ser Leu Cys Trp Arg Asp Val
                   50                   55                   60
Gly Asp Leu Met Glu Asp Ala Glu Val Leu Gly Asp Val Arg Ala Met
                   65                   70                   75                   80
Arg Trp Lys Ser Pro Gly Pro Arg Val Thr Val Trp Asn Arg Asp Pro
                   85                   90                   95
Thr Ala Leu Glu His Glu Ile Ser Glu Lys
                   100                   105

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<210> 3933

<211> 656

<212> PRT

<213> Homo sapiens

<400> 3933

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Met Ala Val Pro Met Pro Ser Lys Arg Arg Ser Leu Val Val Gln Thr
  1                   5                   10                   15
Ser Met Asp Ala Tyr Thr Pro Pro Asp Thr Ser Ser Gly Ser Glu Asp
                   20                   25                   30
Glu Gly Ser Val Gln Gly Asp Pro Gln Gly Thr Pro Thr Ser Ser Gln
                   35                   40                   45
Gly Ser Ile Asn Met Glu His Trp Ile Ser Gln Ala Ile His Gly Ser
                   50                   55                   60

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Thr Thr Ser Thr Thr Ser Ser Ser Ser Thr Gln Ser Gly Gly Ser Gly
 65 70 75 80
 Ala Ala His Arg Leu Ala Asp Val Met Ala Gln Thr His Ile Glu Asn
 85 90 95
 His Ser Ala Pro Pro Asp Val Thr Thr Tyr Thr Ser Glu His Ser Ile
 100 105 110
 Gln Val Glu Arg Pro Gln Gly Ser Thr Gly Ser Arg Thr Ala Pro Lys
 115 120 125
 Tyr Gly Asn Ala Glu Leu Met Glu Thr Gly Asp Gly Val Pro Val Ser
 130 135 140
 Ser Arg Val Ser Ala Lys Ile Gln Gln Leu Val Asn Thr Leu Lys Arg
 145 150 155 160
 Pro Lys Arg Pro Pro Leu Arg Glu Phe Phe Val Asp Asp Phe Glu Glu
 165 170 175
 Leu Leu Glu Val Gln Gln Pro Asp Pro Asn Gln Pro Lys Pro Glu Gly
 180 185 190
 Ala Gln Met Leu Ala Met Arg Gly Glu Gln Leu Gly Val Val Thr Asn
 195 200 205
 Trp Pro Pro Ser Leu Glu Ala Ala Leu Gln Arg Trp Gly Thr Ile Ser
 210 215 220
 Pro Lys Ala Pro Cys Leu Thr Thr Met Asp Thr Asn Gly Lys Pro Leu
 225 230 235 240
 Tyr Ile Leu Thr Tyr Gly Lys Leu Trp Thr Arg Ser Met Lys Val Ala
 245 250 255
 Tyr Ser Ile Leu His Lys Leu Gly Thr Lys Gln Glu Pro Met Val Arg
 260 265 270
 Pro Gly Asp Arg Val Ala Leu Val Phe Pro Asn Asn Asp Pro Ala Ala
 275 280 285
 Phe Met Ala Ala Phe Tyr Gly Cys Leu Leu Ala Glu Val Val Pro Val
 290 295 300
 Pro Ile Glu Val Pro Leu Thr Arg Lys Asp Ala Gly Ser Gln Gln Ile
 305 310 315 320
 Gly Phe Leu Leu Gly Ser Cys Gly Val Thr Val Ala Leu Thr Ser Asp
 325 330 335
 Ala Cys His Lys Gly Leu Pro Lys Ser Pro Thr Gly Glu Ile Pro Gln
 340 345 350

Phe Lys Gly Trp Pro Lys Leu Leu Trp Phe Val Thr Glu Ser Lys His
 355 360 365
 Leu Ser Lys Pro Pro Arg Asp Trp Phe Pro His Ile Lys Asp Ala Asn
 370 375 380
 Asn Asp Thr Ala Tyr Ile Glu Tyr Lys Thr Cys Lys Asp Gly Ser Val
 385 390 395 400
 Leu Gly Val Thr Val Thr Arg Thr Ala Leu Leu Thr His Cys Gln Ala
 405 410 415
 Leu Thr Gln Ala Cys Gly Tyr Thr Glu Ala Glu Thr Ile Val Asn Val
 420 425 430
 Leu Asp Phe Lys Lys Asp Val Gly Leu Trp His Gly Ile Leu Thr Ser
 435 440 445
 Val Met Asn Met Met His Val Ile Ser Ile Pro Tyr Ser Leu Met Lys
 450 455 460
 Val Asn Pro Leu Ser Trp Ile Gln Lys Val Cys Gln Tyr Lys Ala Lys
 465 470 475 480
 Val Ala Cys Val Lys Ser Arg Asp Met His Trp Ala Leu Val Ala His
 485 490 495
 Arg Asp Gln Arg Tyr Ile Asn Leu Ser Ser Leu Arg Met Leu Ile Val
 500 505 510
 Ala Asp Gly Ala Asn Pro Trp Ser Ile Ser Ser Cys Asp Ala Phe Leu
 515 520 525
 Asn Val Phe Gln Ser Lys Gly Leu Arg Gln Glu Val Ile Cys Pro Cys
 530 535 540
 Ala Ser Ser Pro Glu Ala Leu Thr Val Ala Ile Arg Arg Pro Thr Asp
 545 550 555 560
 Asp Ser Asn Gln Pro Pro Gly Arg Gly Val Leu Ser Met His Gly Leu
 565 570 575
 Thr Tyr Gly Val Ile Arg Val Asp Ser Glu Glu Lys Leu Ser Val Leu
 580 585 590
 Thr Val Gln Asp Val Gly Leu Val Met Pro Gly Ala Ile Met Cys Ser
 595 600 605
 Val Lys Pro Asp Gly Val Pro Gln Leu Cys Arg Thr Asp Glu Ile Gly
 610 615 620
 Glu Leu Cys Val Cys Ala Val Ala Thr Gly Thr Ser Tyr Tyr Gly Leu
 625 630 635 640

Ser Gly Met Thr Lys Asn Thr Phe Glu His Thr Ser Asn Lys Gly Lys
 645 650 655

<210> 3934

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3934

Met Leu Ile Met Tyr Glu Gln Arg Lys Asp Ile Lys Leu Glu Leu Thr
 1 5 10 15
 Phe Lys Gly Glu Ala Lys His Lys Arg Leu Lys Asn Leu Gln Thr Ser
 20 25 30
 His Val Val Glu Lys Lys Ser Pro Phe Ser Gly Glu Gln Phe Arg Leu
 35 40 45
 Ala Ala Glu Ile Cys Ile Ala Lys Arg Lys Ala His Ala Asp Ser His
 50 55 60
 Asp Asn Gly Gly Asn Ala Ser Lys Ala Phe Gln Arg Ser Leu Trp Gln
 65 70 75 80
 Pro Leu Pro Ser Gln Ala Trp Arg Pro Gly Arg Thr Glu Trp Phe Cys
 85 90 95
 Gly Pro His Leu Glu Pro Asp Tyr Pro Val Gln Ala Trp Asp Thr Ala
 100 105 110
 Pro Cys Ile Pro Ala Ile Leu Ala Pro Ala Val Ala Gln Arg Gly Pro
 115 120 125
 Gly Thr Ala Trp Ala Thr Ala Ser Glu Gly Ala Asn His Lys Pro Trp
 130 135 140
 Trp Phe Pro His Ala Val Lys Pro Val Gly Met Gln Ser Ala Arg Val
 145 150 155 160
 Glu Ala Trp Glu Pro Pro Pro Gly Phe Gln Arg Met Cys Gly Lys Ala
 165 170 175
 Trp Met Ser Arg Gln
 180

10000

<210> 3935

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3935

Met Ala Cys Arg Glu Arg Ile Gly Asp Asn Ser Gly Pro Gln Arg Arg
1 5 10 15
Ala Ala Thr Glu Gly Glu Ala Gly Glu Arg Ala Ala Ala Pro Ala Leu
20 25 30
Gly Arg Val Leu Trp Ser Thr Gln Lys Asp Cys Pro Gly Ser Lys Gly
35 40 45
Pro Glu Glu Lys Ala Ala Leu Gly Ser Ala Pro Pro Ala Gly Ser Leu
50 55 60
Leu Pro Arg Glu Ala Glu Arg Cys Pro Pro Thr Arg Arg Ala Leu Cys
65 70 75 80
Tyr Pro Val Leu Ser Gly Phe Ala Glu Pro Ser Thr Thr Gln Pro Arg
85 90 95
Pro Pro Glu Lys Thr Pro Leu Thr Pro Thr Ser Cys His Pro Thr Ala
100 105 110
Cys Trp Gly Asp Arg Pro Gln Cys Leu Ile His Gly Leu Leu Arg Arg
115 120 125
Phe

<210> 3936

<211> 533

<212> PRT

<213> Homo sapiens

<400> 3936

Met Leu Pro Arg Gln Ala Ser Ile Ser Cys Ala Gln Gly Ile Leu Leu
1 5 10 15

Pro Gln Pro Ser Glu Leu Leu Arg Leu Gln Leu Asn Leu Val Met Asn
 20 25 30
 Glu Gln Lys Glu Lys Ile Thr Glu Lys Val Ile Leu Ser Met Thr Ala
 35 40 45
 Lys Glu His His Lys Glu Gln Glu Glu Val Ser Arg Arg Ile Asp Glu
 50 55 60
 Leu Gln Thr Ala Ile Lys Ser Asn Ile Gly His Leu Cys Lys Leu Gly
 65 70 75 80
 Pro Gln Leu Gln Ala Glu Gln Glu Gln Phe Ser Ser Tyr Val Tyr Gln
 85 90 95
 His Ile Lys Ser Leu Pro Ala Asn Thr Leu Val Pro Gly Gly Leu Gln
 100 105 110
 Leu Lys Val Phe Glu Asn Gly Lys Asn Thr Gly Glu Ile Ser Val Gly
 115 120 125
 Ile Ser Lys Lys Asp Leu Gly Ser Asp Ser Pro Ile Gln Thr Asp His
 130 135 140
 Met Met Glu Arg Leu Leu Leu Lys Ile His Gln Arg Leu Gln Gly Ser
 145 150 155 160
 Ser Ile Asn Pro Pro Gly Leu Asn Tyr Ser Ser Met Arg Leu Phe Asp
 165 170 175
 Glu Asn Gly Gln Glu Ile Lys Asn Pro Leu Ser Leu Lys Asn Glu Gln
 180 185 190
 Lys Ile Trp Val Ser Tyr Gly Arg Ala Tyr Arg Ser Pro Leu Asn Leu
 195 200 205
 Ala Leu Gly Leu Thr Phe Asp Arg Val Ser Ala Phe Ala Arg Gly Asp
 210 215 220
 Ile Met Val Ala Tyr Lys Thr Phe Leu Asp Pro Asn Ala Val Leu Leu
 225 230 235 240
 Pro Gly Cys Gly Asn Trp Glu Val Cys Glu Gly Phe Pro Ile Asn Phe
 245 250 255
 Asn Cys Thr Ser Gln Gln Ile Pro Asp Gln Phe Glu Lys Val Asp Leu
 260 265 270
 Glu Asn His Phe Leu Gln Asn Lys Val Asp Pro Asn Ile Val Leu His
 275 280 285
 Ala Ser Val Ser Ile Gly Lys Trp Ser Phe Ser Gly Ser Glu Ala Ser

290	295	300	
Ser Arg Ser Gln Ile Ala Pro Ser Ile Leu Trp Pro Val Ala Ser Val			
305	310	315	320
Trp Leu Ile Thr Lys Thr Gly Met Ile Leu Ser Arg Ala Ile Thr Gln			
	325	330	335
Gly Cys Leu Ala Ile Gly His Pro Ile Arg Val Lys Ala Ala Glu Gly			
	340	345	350
Thr Ser Leu Glu Gly Tyr Lys Leu Ile Leu Gln Lys Arg His Ser Gly			
	355	360	365
Asp Asp Ser Gln Lys Trp Val Phe Gly Thr Asp Gly Cys Ile Tyr Ser			
370	375	380	
Lys Ala Tyr Pro Gln Phe Val Leu Thr Tyr Leu Glu Glu Leu Asn Ala			
385	390	395	400
Gln Val Asp Val Thr Gln Thr Glu Tyr His Ile His His Gly Ala Trp			
	405	410	415
Thr Thr Ala His Gln Glu His Gly Arg Asn Leu Ala Glu Glu Val Leu			
	420	425	430
Gln Glu Ser Ala Ser Asn Leu Gly Leu Lys Gln Leu Pro Glu Pro Ser			
	435	440	445
Asp Thr His Leu Met Pro Glu Gly Ser Leu Glu Glu Thr Gly Glu Leu			
450	455	460	
Thr Val Ala Leu Val Arg Lys Leu Glu Glu Lys His Pro Lys Ala Ser			
465	470	475	480
Ala Gln Arg Trp Ala Ile Lys His Glu Gly Thr Ser Lys Pro Gly Gln			
	485	490	495
Trp Lys His Ser Arg Val Glu Asn Pro Leu Trp Asn Lys Leu Thr Tyr			
	500	505	510
Met Trp Pro Val Leu Pro Ser Gly Gln Leu Asn Glu Ala Met Gln Thr			
	515	520	525
Glu Gln Gly Arg Arg			
530			

<210> 3937

<211> 234

<212> PRT

<213> Homo sapiens

<400> 3937

Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys Arg Ile His Glu
 1 5 10 15
 Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln Pro Val Glu Cys
 20 25 30
 Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala Gln Ile Ala Ala
 35 40 45
 Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu Gln Gly Thr Lys
 50 55 60
 Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val Trp His Cys Pro
 65 70 75 80
 Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp Thr Ser Gly Ala
 85 90 95
 Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu Gly Gly Arg Ser
 100 105 110
 Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu Glu Val Asp His
 115 120 125
 Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala Leu Arg Val Pro
 130 135 140
 Ala Phe Glu Thr Leu Lys Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp
 145 150 155 160
 Tyr Asn Thr Phe Asp Gln Asn Gly Val Val Gly Pro His Pro Leu Val
 165 170 175
 Val Asn Met Tyr Phe Ala Thr Gly Phe Ser Gly His Gly Leu Gln Gln
 180 185 190
 Ala Pro Gly Ile Gly Arg Ala Val Ala Glu Met Val Leu Lys Gly Arg
 195 200 205
 Phe Gln Thr Ile Asp Leu Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu
 210 215 220
 Gly Glu Lys Ile Gln Glu Asn Asn Ile Ile
 225 230

<210> 3938

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3938

```

Met Ala Asn Tyr Tyr Glu Val Leu Gly Val Gln Ala Ser Ala Ser Pro
  1             5             10             15
Glu Asp Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Arg Trp His Pro
          20             25             30
Asp Lys Asn Pro Asp Asn Lys Glu Glu Ala Glu Lys Lys Phe Lys Leu
          35             40             45
Val Ser Glu Ala Tyr Glu Val Leu Ser Asp Ser Lys Lys Arg Ser Leu
          50             55             60
Tyr Asp Arg Ala Gly Cys Asp Ser Trp Arg Ala Gly Gly Gly Ala Ser
  65             70             75             80
Thr Pro Tyr His Ser Pro Phe Asp Thr Gly Tyr Thr Phe Arg Asn Pro
          85             90             95
Glu Asp Ile Phe Arg Glu Phe Phe Gly Gly Leu Asp Pro Phe Ser Phe
          100            105            110
Glu Phe Trp Asp Ser Pro Phe Asn Ser Asp Arg Gly Gly Arg Gly His
          115            120            125
Gly Leu Arg Gly Ala Phe Ser Ala Gly Phe Gly Glu Phe Pro Ala Phe
          130            135            140
Met Glu Ala Phe Ser Ser Phe Asn Met Leu Gly Cys Ser Gly Gly Ser
  145            150            155            160
His Thr Thr Phe Ser Ser Thr Ser Phe Gly Gly Ser Ser Ser Gly Ser
          165            170            175
Ser Gly Phe Lys Ser Val Met Ser Ser Thr Glu Met Ile Asn Gly His
          180            185            190
Lys Val Thr Thr Lys Arg Ile Val Glu Asn Gly Gln Glu Arg Val Glu
          195            200            205
Val Glu Glu Asp Gly Gln Leu Lys Ser Val Thr Val Asn Gly Lys Glu
          210            215            220
Gln Leu Lys Trp Met Asp Ser Lys
225                230

```

<210> 3939

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3939

```

Met Ala Gln Gln Arg Ala Leu Pro Gln Ser Lys Glu Thr Leu Leu Gln
 1             5             10            15
Ser Tyr Asn Lys Arg Leu Lys Asp Asp Ile Lys Ser Ile Met Asp Asn
      20             25            30
Phe Thr Glu Ile Ile Lys Thr Ala Lys Ile Glu Asp Glu Thr Gln Val
      35             40            45
Ser Arg Ala Thr Gln Gly Glu Gln Asp Asn Tyr Glu Met His Val Arg
      50             55            60
Ala Ala Asn Ile Val Arg Ala Gly Glu Ser Leu Met Lys Leu Val Ser
      65             70            75            80
Asp Leu Lys Gln Phe Leu Ile Leu Asn Asp Phe Pro Ser Val Asn Glu
      85             90            95
Ala Ile Asp Gln Arg Asn Gln Gln Leu Arg Thr Leu Gln Glu Glu Cys
      100            105            110
Asp Arg Lys Leu Ile Thr Leu Arg Asp Glu Ile Ser Ile Asp Leu Tyr
      115            120            125
Glu Leu Glu Glu Glu Tyr Tyr Ser Ser Arg Tyr Lys
      130            135            140

```

<210> 3940

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3940

```

Met Trp Lys Glu Asn Gly Lys Lys Pro Gly Ser Phe Pro Thr Gln Leu
 1             5             10            15
Arg Pro Asn Tyr Gln Leu Asn Ser Ser Arg Asn Met Leu Thr Ser Thr

```

20	25	30
Ala Val Lys His Asp Leu Ala Glu Ser Phe Pro Phe Trp Ala Ser Lys		
35	40	45
Gly Lys Leu Glu Trp Gln His Ile His Gln Gln Pro Pro Tyr Ser Lys		
50	55	60
Cys Phe Glu Asp His Leu Glu Gln Lys Tyr Val Gln Leu Phe Trp Gly		
65	70	75
80		
Leu Pro Ser Leu His Ser Glu Ser Leu His Pro Thr Val Phe Val Gln		
85	90	95
His Gly Arg Ser Ser Met Phe Val Phe Phe Asn Gly Ile Thr Asn Thr		
100	105	110
Ser Met Ser His Glu Ser Pro Val Leu Pro Pro Pro Gln Pro Leu Phe		
115	120	125
Leu Pro Ser Thr Gln Pro Leu Pro Leu Pro Gln Thr Leu Pro Arg Gly		
130	135	140
Gln Ser Leu His Leu Thr Gln Val Lys Ser Leu Ala Gln Pro Gln Ser		
145	150	155
160		
Pro Phe Pro Ala Leu Pro Pro Ser Pro Leu Phe Leu Ile Arg Val Cys		
165	170	175
Gly Val Cys Phe His Arg Pro Gln Asn Glu Ala Arg Ser Leu Met Pro		
180	185	190
Ser Glu Ile Asn His Leu Glu Trp Asn Val Leu Gln Lys Val Gln Glu		
195	200	205
Ser Val Trp Gly Leu Pro Ser Val Val Gln Lys Ser Gln Glu Asp Phe		
210	215	220
Cys Pro Pro Ala Pro Asn Pro Val Leu Val Arg Lys Ser Phe Lys Val		
225	230	235
240		
His Val Pro Ile Ser Ile Ile Pro Gly Asp Phe Pro Leu Ser Ser Glu		
245	250	255
Val Arg Lys Lys Leu Glu Gln His Ile Arg Lys Arg Leu Ile Gln Arg		
260	265	270
Arg Trp Gly Leu Pro Arg Arg Ile His Glu Ser Leu Ser Leu Leu Arg		
275	280	285
Pro Gln Asn Lys Ile Ser Glu Leu Ser Val Ser Glu Ser Ile His Gly		
290	295	300
Pro Leu Asn Ile Ser Leu Val Glu Gly Gln Arg Cys Asn Val Leu Lys		

305 310 315 320
 Lys Ser Ala Ser Ser Phe Pro Arg Ser Phe His Glu Arg Ser Ser Asn
 325 330 335
 Met Leu Ser Met Glu Asn Val Gly Asn Tyr Gln Gly Cys Ser Gln Glu
 340 345 350
 Thr Ala Pro Lys Lys Pro Ser Leu Ala
 355 360

<210> 3941

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3941

Met Ala Glu Ala Gly Lys Val Pro Leu Ser Leu Gly Leu Thr Gly Gly
 1 5 10 15
 Glu Ala Ala Glu Trp Pro Leu Gln Arg Tyr Ala Arg Cys Ile Pro Ser
 20 25 30
 Asn Thr Arg Asp Pro Pro Gly Pro Cys Leu Glu Ala Gly Thr Ala Pro
 35 40 45
 Cys Pro Thr Trp Lys Val Phe Asp Ser Asn Glu Glu Ser Gly Tyr Leu
 50 55 60
 Val Leu Thr Ile Val Ile Ser Gly His Phe Phe Ile Phe Gln Gly Gln
 65 70 75 80
 Thr Leu Leu Glu Gly Phe Ser Leu Ile Gly Ser Lys Asp Trp Leu Lys
 85 90 95
 Ile Val Arg Arg Val Asp Cys Leu Leu Phe Gly Thr Thr Ile Lys Asp
 100 105 110
 Lys Ser Arg Leu Phe Arg Val Gln Phe Ser Gly Glu Ser Lys Glu Gln
 115 120 125
 Ala Leu Glu His Cys Cys Ser Cys Val Gln Lys Leu Ala Gln Tyr Ile
 130 135 140
 Thr Val Gln Val Pro Asp Gly Asn Ile Gln Glu Leu Gln Leu Ile Pro
 145 150 155 160
 Gly Pro Pro Arg Ala Thr Glu Ser Gln Gly Lys Asp Ser Ala Lys Ser

165 170 175
 Val Pro Arg Gln Pro Gly Ser His Gln His Ser Glu Gln Gln Gln Val
 180 185 190
 Cys Val Thr Ala Gly Thr Gly Ala Pro Asp Gly Arg Thr Ser Leu Thr
 195 200 205
 Gln Leu Ala Gln Thr Leu Leu Ala Ser Glu Glu Leu Pro His Val Tyr
 210 215 220
 Glu Gln Ser Ala Trp Gly Ala Glu Glu Leu Gly Pro Phe Leu Arg Leu

 225 230 235 240
 Cys Leu Met Asp Gln Asn Phe Pro Ala Phe Val Glu Glu Val Glu Lys
 245 250 255
 Glu Leu Lys Lys Leu Ala Gly Leu Arg Asn
 260 265

<210> 3942

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3942

Met Gln Ser Ser Trp Gln Val Pro Leu His Pro Pro Gly Ser Pro Trp
 1 5 10 15
 Pro Gln Leu Thr Leu Arg Ile Leu Pro Val Trp Gly Val Leu Arg Glu
 20 25 30
 Pro Leu Gln Ile Val Leu Glu Gln Gln Leu Val Pro Gly Asp Pro Leu
 35 40 45
 His Gly Leu Gln His Val Val Leu Gln Arg Gln Val Pro Ala Tyr Leu
 50 55 60
 Leu Leu Leu Trp Gly Gln Arg Glu His Trp Ala Leu Gln Gly His Val
 65 70 75 80
 Cys Gly Cys Gln Pro His Arg Leu Leu Ala Thr Thr Ala Pro Gly Ser
 85 90 95
 Cys Pro Glu Leu Ala Ala Gln Asn
 100

<210> 3943

<211> 1080

<212> PRT

<213> Homo sapiens

<400> 3943

```

Met Leu Arg Leu Pro Lys Lys Arg Leu Pro Arg Phe Glu Gln Val Gln
 1             5             10             15
Asp Glu Asp Thr Tyr Leu Glu Asn Leu Ala Ile Gln Arg Asn Ala Ser
      20             25             30
Ala Phe Phe Glu Lys Tyr Asp Arg Ser Glu Ile Gln Glu Leu Leu Thr
      35             40             45
Thr Ala Leu Val Ser Trp Leu Ser Ala Lys Glu Asp Val Arg Ser Gln
      50             55             60
Val Asp Leu Pro Cys Gly Ile Met Ser Gln Met Asn Asn Val Gly Phe
 65             70             75             80
Ser Thr Ala Ile Leu Leu Thr Pro Val Asp Pro Thr Ala Leu Leu Asp
      85             90             95

Tyr Arg Glu Val His Gln Met Ile Arg Glu Leu Ala Ile Gly Ile Tyr
      100             105             110
Cys Leu Asn Gln Ile Pro Ser Ile Ser Leu Glu Ala Asn Tyr Asp Gln
      115             120             125
Ser Ser Ser Cys Gln Leu Pro Pro Ala Tyr Tyr Asp Thr Arg Ile Gly
      130             135             140
Gln Ile Leu Ile Asn Ile Asp Tyr Met Leu Lys Ala Leu Trp His Gly
 145             150             155             160
Ile Tyr Met Pro Lys Glu Lys Arg Ala Arg Phe Ser Glu Leu Trp Arg
      165             170             175
Ala Ile Met Asp Ile Asp Pro Asp Gly Lys Pro Gln Thr Asn Lys Asp
      180             185             190
Ile Phe Ser Glu Phe Ser Ser Ala Gly Leu Thr Asp Ile Thr Arg Asp
      195             200             205
Pro Asp Phe Asn Glu Ile Tyr Asp Glu Asp Val Asn Glu Asp Pro Thr

```

210	215	220
Tyr Asp Pro Asn Ser Pro Glu Glu Thr Ala Val Phe Met Lys Tyr Ala		
225	230	235
Glu Asn Ile Met Leu Lys Leu Thr Phe Ser Thr Thr Gln Ile Gln Gln		240
	245	250
		255
Tyr Glu Asn Val Phe Ile Phe Glu Thr Gly Tyr Trp Leu Thr Asn Ala		
	260	265
		270
Ile Lys Tyr Asn Gln Asp Tyr Leu Asp Ile Cys Thr Tyr Gln Arg Leu		
	275	280
		285
Gln Gln Arg Leu Tyr Leu Gln Lys Lys Ile Ile Gln Lys His Phe Glu		
	290	295
		300
Lys Lys Lys Asp Ile Arg Arg Gly Ile Gly Tyr Leu Lys Leu Ile Cys		
305	310	315
		320
Phe Leu Ile Pro Phe Leu Leu Ser Leu Lys Lys Lys Met Lys Val Pro		
	325	330
		335
Tyr Leu Ser Ser Leu Leu Gln Pro Phe Ser Asp Asp Lys Val Lys Thr		
	340	345
		350
Glu Arg Glu Leu Pro Pro Phe Ile Tyr Gly Arg Asp Phe Lys Cys Gln		
	355	360
		365
Asn Phe His Tyr Lys Glu Asn Gln Tyr Phe His Val His Gly Gly Ile		
	370	375
		380
Glu Phe Asp Ile Ser Thr Pro Ser Ile Glu Asn Ala Leu Glu Asp Phe		
385	390	395
		400
Gln Lys Asn Leu Glu Lys Ile Arg Asp Cys Ala Ala Asn Thr Phe Ile		
	405	410
		415
Glu Asp Ser Gly Tyr Lys Glu Tyr Tyr Ser Ile Pro Val Met Glu Phe		
	420	425
		430
His Gly Lys Ser Tyr Tyr Val Ile Tyr Phe Glu Leu Glu Thr Phe Tyr		
	435	440
		445
Gln Gln Leu Tyr Lys Thr Gln Trp Trp Gly Ala Ile Asn Glu Ile Val		
	450	455
		460
Asn Asn Leu Arg Leu Lys Arg Leu Pro Leu Thr Asp Ala Gln Leu His		
465	470	475
		480
Glu Gln Phe Lys Lys Lys Leu Gly Phe Lys Arg Ala Met Lys Cys Lys		
	485	490
		495
Ser Ile Pro Phe Gly Met Lys Ser Ala Val Glu Arg Gly Leu Ser Ala		

500	505	510
Val Phe His Thr Phe Ser Arg Lys Thr Ser Ser Ser Thr Ile Asn Val		
515	520	525
Ser Asp Glu Ala Gly Tyr Thr Ile Phe His His Ala Ala Leu His Asn		
530	535	540
Arg Val Ser Ile Ile Cys Gln Leu Cys Asn Ala Asn Phe Lys Val Asn		
545	550	555
Gln Arg Arg Phe Val Thr Phe Ser Gln Gly Pro Thr Pro Leu His Leu		
565	570	575
Ala Ala Gln Ala Cys Ser Leu Glu Thr Thr Val Cys Leu Leu Cys Ser		
580	585	590
Lys Ala Asp Tyr Thr Leu Ser Glu Lys Arg Gly Trp Met Pro Ile His		
595	600	605
Phe Ala Ala Phe Tyr Asp Asn Val Cys Ile Ile Ile Ala Leu Cys Arg		
610	615	620
Lys Asp Pro Ser Leu Leu Glu Ala Glu Ala Thr Ala Glu Asn Gln Cys		
625	630	635
Thr Pro Leu Leu Leu Ala Ala Thr Ser Gly Ala Leu Asp Thr Ile Gln		
645	650	655
Tyr Leu Phe Ser Ile Gly Ala Asn Trp Arg Lys Thr Asp Ile Lys Gly		
660	665	670
Asn Asn Ile Ile His Leu Ser Val Leu Thr Phe His Thr Glu Val Leu		
675	680	685
Lys Tyr Ile Ile Lys Leu Asn Ile Pro Glu Leu Pro Val Trp Lys Thr		
690	695	700
Leu Val Glu Met Leu Gln Cys Glu Ser Tyr Lys Arg Arg Met Met Ala		
705	710	715
Val Met Ser Leu Glu Val Ile Cys Leu Ala Asn Asp Gln Tyr Trp Arg		
725	730	735
Cys Ile Leu Asp Ala Gly Thr Ile Pro Ala Leu Ile Asn Leu Leu Lys		
740	745	750
Ser Ser Lys Ile Lys Leu Gln Cys Lys Thr Val Gly Leu Leu Ser Asn		
755	760	765
Ile Ser Thr His Lys Ser Ala Val His Ala Leu Val Glu Ala Gly Gly		
770	775	780
Ile Pro Ser Leu Ile Asn Leu Leu Val Cys Asp Glu Pro Glu Val His		

785	790	795	800
Ser Arg Cys Ala Val Ile Leu Tyr Asp Ile Ala Gln Cys Glu Asn Lys			
805	810	815	
Asp Val Ile Ala Lys Tyr Asn Gly Ile Pro Ser Leu Ile Asn Leu Leu			
820	825	830	
Asn Leu Asn Ile Glu Asn Val Leu Val Asn Val Met Asn Cys Ile Arg			
835	840	845	
Val Leu Cys Ile Gly Asn Glu Asn Asn Gln Arg Ala Val Arg Glu His			
850	855	860	
Lys Gly Leu Pro Tyr Leu Ile Arg Phe Leu Ser Ser Asp Ser Asp Val			
865	870	875	880
Leu Lys Ala Val Ser Ser Ala Ala Ile Ala Glu Val Gly Arg Asp Asn			
885	890	895	
Lys Glu Ile Gln Asp Ala Ile Ala Met Glu Gly Ala Ile Pro Pro Leu			
900	905	910	
Val Ala Leu Phe Lys Gly Lys Gln Ile Ser Val Gln Met Lys Gly Ala			
915	920	925	
Met Ala Val Glu Ser Leu Ala Ser His Asn Ala Leu Ile Gln Lys Ala			
930	935	940	
Phe Leu Glu Lys Ser Leu Thr Lys Tyr Leu Leu Lys Leu Leu Lys Ala			
945	950	955	960
Phe Gln Ile Asp Val Lys Glu Gln Gly Ala Val Ala Leu Trp Ala Leu			
965	970	975	
Ala Gly Gln Thr Leu Lys Gln Gln Lys Tyr Met Ala Glu Gln Ile Gly			
980	985	990	
Tyr Ser Phe Ile Ile Asn Met Leu Leu Ser Pro Ser Ala Lys Met Gln			
995	1000	1005	
Tyr Val Gly Gly Glu Ala Val Ile Ala Leu Ser Lys Asp Ser Arg Met			
1010	1015	1020	
His Gln Asn Gln Ile Cys Glu Gly Asn Gly Ile Ala Pro Leu Val Arg			
1025	1030	1035	1040
Leu Leu Arg Ile Ser Thr Ile Ala Glu Gly Thr Leu Leu Ser Val Ile			
1045	1050	1055	
Arg Ala Val Gly Ser Ile Cys Ile Gly Tyr Leu Leu Lys Ser Arg Leu			
1060	1065	1070	
Cys Ile Asn Thr Phe Cys Leu Gln			

1075

1080

<210> 3944

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3944

Met Arg Lys Gly Asn Leu Leu Leu Ser Trp Leu Leu Gly Pro Glu Leu

1 5 10 15

Pro Glu Leu Ser Pro Arg Ala Arg Lys Ala Asp Leu Lys Asp Glu Asn

20 25 30

Leu Lys Phe Ser Cys Trp Trp Glu Pro Arg Lys Thr Ala Gly Val Leu

35 40 45

Thr Trp Pro Phe Leu Ala Glu Leu Ala Glu Val Gly Val Leu Ala Asp

50 55 60

Gly Met Tyr Leu Gly Ala Val Ser Val Ala Gln Gln Arg Cys Arg Ala

65 70 75 80

Asp Trp Leu Ser His Trp Val Leu Pro Ala Gly Ser Pro Leu His Trp

85 90 95

Ala Phe Thr Gln Pro Cys Ser Trp Val Ser Leu Pro Cys Lys Gln Ser

100 105 110

His Asn Asn Thr Arg Ile Val

115

<210> 3945

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3945

Met Glu Lys Thr Gln Thr Ile Gly Arg Gly Asp Glu His Val Ile Ile

1 5 10 15

Val Thr Thr Cys Leu Glu Ala Thr Arg Met Glu Trp Gly Arg Leu Lys

```

          20          25          30
Glu Glu Ile Phe Thr Gly Leu Thr Ser His His Ser Ser Arg Val Val
          35          40          45
Val Ile Thr Pro Glu Gly Lys Ile Ile Ser Val Phe Tyr Gly Leu Ile
          50          55          60
Ile Gly Asp Ser Ser Cys Phe Glu Asp Thr Asn Thr Glu Ala Ser Ser
          65          70          75          80
Arg Thr Tyr Ser Gln Phe Pro Trp Ser Gln Cys Cys Gln Trp Phe Tyr
          85          90          95
Lys Gly Leu Met Asn Leu Tyr Leu Val Asp His Lys
          100          105

```

<210> 3946

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3946

```

Met Gln Ala Ala Ser Leu Arg Ala Gly Ile Leu Gln Ile Val Gly Leu
  1          5          10          15
Lys Ile Ile Arg Asn Val Glu Ala Leu Lys Ala Phe Leu Arg Asn Ser
          20          25          30
Arg Ala Thr Met Ala His Gln Trp Cys Tyr Gly Ala Met Gly Ala Pro
          35          40          45
Gln Phe Gly Leu Ser Tyr Leu Glu Gly Ser Ala Gly His Ser Ala Asn
          50          55          60
Thr Pro Ala Phe His Ile Leu Gly Asp His Val Trp Met Ala Leu Met
          65          70          75          80
Cys Pro Ile Leu Val Glu Glu His Arg Lys Ala Ser Phe Leu His Phe
          85          90          95
Lys Glu Ala Arg Glu Thr Cys Glu Val Phe Ser Thr Ser Leu Val His
          100          105          110
Pro

```

<210> 3947

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3947

```

Met Ile Thr Ser Pro Cys Ser Pro Ala Ala Phe Pro Pro Pro Ser Thr
  1             5             10             15
Ser Pro Thr Leu Arg Ala Pro His Leu Pro Ser His Pro Pro Pro Ser
      20             25             30
Tyr Leu Phe Leu Tyr Asp Ser Ser Leu Arg Ala Ser Leu Ser Leu Val
      35             40             45
Thr Ser Leu Ile Tyr Cys Lys Tyr Arg Lys Val Lys Ser Gly Gln Asn
      50             55             60
Arg Gln Arg Ser Ser Trp Leu Ala Ser Asn Asn Ser Tyr Asn Asn Tyr
      65             70             75             80
Ser Pro Val Asn Asn Ser Leu Leu Ser Ile Thr Ala Asp Met Phe Ser
      85             90             95
Trp His Phe Gln Ala Tyr Ser Leu Ile Cys Phe Ser Lys Asn Ser Ile
      100            105            110
Arg Val Glu Ala Thr Gly Lys Glu Ile Lys Phe Ile Ala Gly Tyr Gln
      115            120            125
Arg Pro Arg Glu Ile Arg Glu Tyr Cys Tyr Cys Tyr Tyr Pro Tyr Tyr
      130            135            140
Tyr His Cys Leu Lys Leu
145             150

```

<210> 3948

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3948

```

Met Thr Gln Thr His Ser Leu Arg Ser Val Phe Val Phe Gln Arg Tyr

```

1	5	10	15
Val Cys Ile	Ser Pro Thr	Leu Arg Phe Met	Val Thr Gln Ser Arg Gly
20	25	30	
Phe Ser Leu	Ala Leu Pro Thr	Ala Glu Thr Cys Ser	Phe Leu Ala Arg
35	40	45	
Tyr Pro Gln	Gly Pro Ala Ala	Gly Gly Gly Thr	Ser Gln Ser Gly Trp
50	55	60	
Gly Pro Pro	Ser Gly Gln Asn	Ile Ile Leu Trp	Lys Lys Val Phe Ser
65	70	75	80
Asn Ala Phe	Leu Arg Gln Asp	Leu Val Leu Ser	Pro Arg Val Gly Ser
85	90	95	
Ala Val Val	Gln Leu Arg Gly	Asn Ser Met Leu	Ala Val Leu Thr Ala
100	105	110	
Leu Ala Arg	Ser Arg Arg Leu	Leu Cys Leu Gly	Ser Tyr Phe Gly Gly
115	120	125	
Thr			

<210> 3949

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3949

Met Ala Glu	Gly His Gly	Phe Leu Lys Asp	His Cys Gly Cys Cys Val
1	5	10	15
Asn Arg Gly	Thr Ser Asp Glu	Gln Asn Gln Ala	Leu Asn Cys Glu Met
20	25	30	
Thr Ala Glu	Met Cys Lys Arg	Ala Arg Trp Cys	Leu Asp Leu Leu Val
35	40	45	
Ala Ala Glu	Ser Val Arg Asn	Gly Trp Arg Pro	Val Cys Val Gln Met
50	55	60	
Glu Pro Asn	Glu Leu Pro Trp	Glu Gly Trp Val	Gly Cys Ser Arg Val
65	70	75	80
Gly Arg Glu	Glu Leu Gly Asn	Leu Glu Asp Ser	Ser Leu Ser Asn Trp

	85	90	95
Ala Glu Gly Asp Val Ile Phe Leu Lys Thr Arg Glu Lys Trp Ala Trp			
100	105	110	
Glu Gly Lys Phe Asp Leu Arg His Ala Asn			
115	120		

<210> 3950

<211> 257

<212> PRT

<213> Homo sapiens

<400> 3950

Met His Ala Lys Ile Trp Leu Met Lys Thr Ser Leu Arg Ser Gly Arg			
1	5	10	15
Ala Ala Leu Arg Glu Leu Arg Ser Arg Glu Asn Phe Leu Ser Lys Leu			
20	25	30	
Asn Arg Glu Leu Ile Glu Thr Ile Gln Glu Met Glu Asn Ser Thr Thr			
35	40	45	
Leu His Val Arg Ala Leu Leu Gln Gln Gln Asp Thr Leu Ala Thr Ile			
50	55	60	
Ile Asp Ile Leu Glu Tyr Ser Asn Lys Lys Arg Leu Gln Gln Leu Lys			
65	70	75	80
Ser Glu Leu Gln Glu Trp Glu Glu Lys Lys Lys Cys Lys Met Ser Tyr			
85	90	95	
Leu Glu Gln Gln Ala Glu Gln Leu Asn Ala Lys Ile Glu Lys Thr Gln			
100	105	110	
Glu Glu Val Asn Phe Leu Ser Thr Tyr Met Asp His Glu Tyr Ser Ile			
115	120	125	
Lys Ser Val Gln Ile Ser Thr Leu Met Arg Gln Leu Gln Gln Val Lys			
130	135	140	
Asp Ser Gln Gln Asp Glu Leu Asp Asp Leu Gly Glu Met Arg Arg Lys			
145	150	155	160
Val Leu Glu Ser Leu Ser Asp Lys Ile Gln Lys Lys Lys Lys Lys Ile			
165	170	175	
Leu Ser Ser Val Val Ala Val Ser Ser Gln Leu Leu Cys Gly Ser Gly			

180 185 190
 Asp Pro Gly Leu Thr Pro Thr Pro Pro Ser Ser Pro Ser Ser Ala Ser
 195 200 205
 Arg Pro Thr Ala Ala Pro Ser Val Ser Thr Met Phe Cys Cys Pro Gly
 210 215 220
 Arg Gly Thr Trp Gly Pro Asp Leu Phe Phe Leu His Arg Lys Pro Ser
 225 230 235 240
 Val Pro Met Lys Arg Leu Ser Tyr Arg Arg Cys Gly Glu Ala Arg Thr
 245 250 255
 Ser

<210> 3951

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3951

Met Thr Ser Ala Lys Thr Leu Arg Gly Arg His Ser Ser Thr Lys Thr
 1 5 10 15
 Leu Phe Pro Ser Glu Val Pro Phe Thr Gly Thr Gly Val Arg Thr Ser
 20 25 30
 Pro Cys Leu Leu Gly Ala Ile Pro Phe Asn Leu Gln Gln Pro Leu Val
 35 40 45
 Ser Val His Asn Ala Asn Glu Val Arg Val Ala Ser Pro Gln Ala Asn
 50 55 60
 Asn Phe Pro Gln Ile Ala Ala Arg Cys Gly Pro Ala Lys Ser Gln Gly
 65 70 75 80
 Ala Ala Ile Ser Lys Gln Ser Pro Pro Val Leu Glu Gly Val Cys Arg
 85 90 95
 Asp Ala Ser Gly Glu Arg Pro Gly Pro Gly Ala Gly Leu Gln Leu Trp
 100 105 110
 Asp Lys Leu Leu Ser Gly Pro Gly Ala Thr Gln Arg Arg Gln Ala Ala
 115 120 125
 Val Gln Val Lys Pro Ile Gln His Leu Ala Pro Cys Leu Gln Ala

130

135

140

<210> 3952

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3952

Met Ser His Cys Pro Arg Ala Cys Lys Leu Phe Phe Asn Phe Ser Ser
 1 5 10 15
 Trp Thr Ser Leu Cys Cys Gly Ser Pro Ser Val Ser Leu Ala Ser His
 20 25 30
 Ser Gln Thr Gly Lys Ala Arg Ser Phe Ser Ser Leu Ala Phe Ser Ser
 35 40 45
 Ser Ile Ser Phe Leu Leu Gly His Ser Ser Val Leu Ile Tyr Ser Gly
 50 55 60
 Phe Phe Leu Phe Lys Asn Leu Phe His Ser Tyr Val Ser Cys Gly Leu
 65 70 75 80
 Asp Glu Ile Leu His Asp Phe Ile Gln Ser His Gly Thr Arg Leu Leu
 85 90 95
 Glu Ser Ser Glu Ile Cys Leu Phe Ile Asn Pro Leu Gln Trp Asp Ser
 100 105 110
 His

<210> 3953

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3953

Met Glu Gly Thr Tyr Ile Thr Ser Glu His Ser Tyr Gln Lys Pro Gln
 1 5 10 15
 Ser Phe Gly Gln Asp Cys Lys Ser Leu Ala Asp Pro Gly Ser Ser Asp

20 25 30
 Asp Asp Asp Val Ser Ser Leu Glu Glu Glu Gln Glu Phe His Met Arg
 35 40 45
 Ser Lys Asn Ser Leu Gln Tyr Ser Ala Lys Glu His Gly Met Pro Glu
 50 55 60
 Lys Asn Pro Ala Glu Gly Asn Thr Val Phe Val Tyr Asn Asp Lys Lys
 65 70 75 80
 Gly Thr Glu Asp Pro Gly Asp Ser His Leu Gln Trp Gln Leu Asn Leu
 85 90 95
 Leu Thr His Ile Glu Asn Val Gln Asn Glu Val Thr Ser Arg Met Asp
 100 105 110
 Leu Ile Glu Lys Glu Val Asp Val Leu Glu Ser Trp Leu Asp Phe Thr
 115 120 125
 Gly Glu Leu Glu Pro Pro Asp Pro Leu Ala Arg Leu Pro Gln Leu Lys
 130 135 140
 Arg His Ile Lys Gln Leu Leu Ile Asp Met Gly Lys Val Gln Gln Ile
 145 150 155 160
 Ala Thr Leu Cys Ser Val
 165

<210> 3954

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3954

Met Lys Lys Val Lys Lys Lys Arg Ser Glu Ala Arg Arg His Arg Asp
 1 5 10 15
 Ser Thr Ser Gln His Ala Ser Ser Asn Ser Thr Ser Gln Gln Pro Ser
 20 25 30
 Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His
 35 40 45
 Ser Ser Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro
 50 55 60
 Ala Pro Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala

65 70 75 80
 Asn Val Lys Ala Ala Pro Gln Ser Arg Lys Ala Gly Gly Leu Ser Ser
 85 90 95
 Ser Phe Ser Ser Ser Ser Leu Pro Ala Asp Gly Val Leu Gly His Pro
 100 105 110

Lys Gly Trp Phe Leu
 115

<210> 3955

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3955

Met Phe Gly Ser Ser Arg Gly Gly Val Arg Gly Gly Gln Asp Gln Phe
 1 5 10 15
 Asn Trp Glu Asp Val Lys Thr Asp Lys Gln Arg Glu Asn Tyr Leu Gly
 20 25 30
 Asn Ser Leu Met Ala Pro Val Gly Arg Trp Gln Lys Gly Arg Asp Leu
 35 40 45
 Thr Trp Tyr Ala Lys Gly Arg Ala Pro Cys Ala Gly Pro Ser Arg Glu
 50 55 60
 Glu Glu Leu Ala Ala Val Arg Glu Ala Glu Arg Glu Ala Leu Leu Ala
 65 70 75 80
 Ala Leu Gly Tyr Lys Asn Val Lys Lys Gln Pro Thr Gly Leu Ser Lys
 85 90 95
 Glu Asp Phe Ala Glu Val Cys Lys Arg Glu Gly Gly Asp Pro Glu Glu
 100 105 110

Lys Gly Val Asp Arg Leu Leu Gly Leu Gly Ser Ala Ser Gly Ser Val
 115 120 125
 Gly Arg Val Ala Met Ser Arg Glu Asp Lys Glu Ala Ala Lys Leu Gly
 130 135 140
 Leu Ser Val Phe Thr His His Arg Val Glu Ser Gly Gly Pro Gly Thr

145 150 155 160
 Ser Ala Ala Ser Ala Arg Arg Lys Pro Arg Ala Glu Asp Gln Thr Glu
 165 170 175
 Ser Arg Gly Val Ser Arg Val Thr Leu Glu Glu Arg Ser
 180 185

<210> 3956

<211> 968

<212> PRT

<213> Homo sapiens

<400> 3956

Met Glu Val Thr Gly His Leu Pro Pro Leu Asn Glu Thr Ala Asn Phe
 1 5 10 15
 Ile Ser Asn Ser Lys Ile Lys Thr Ser Asp Thr Thr Gln Lys Asn Ser
 20 25 30
 Phe Gln Ser His Ile Asn Ser Val Ala Asn Asp Ile Val Glu Ser Val
 35 40 45
 Leu Gly Lys Met Tyr Leu Val Val Val Thr Ser Leu Tyr Glu Asn Asn
 50 55 60
 Lys Ser Arg Thr Glu Val Glu Ile Ser Asp His Asn Asp Ser Leu Leu
 65 70 75 80
 Met Lys Pro Leu Arg Phe Arg Glu Thr Lys Gln Ala Gly Lys Ile Ser
 85 90 95
 Asn Ser Pro Arg Tyr Ala Ile Ser Gln Ala Tyr Ser Tyr Val Asp Ser
 100 105 110
 Gln Asn Ile Ser Val Met Glu Asn Thr Leu Leu Pro Tyr Leu Pro Leu
 115 120 125
 Gln Val Lys Lys Asp Leu Ile Gln Met Val Leu Asn Lys Ile Thr Asn
 130 135 140
 Phe Val Ser Leu Pro Leu Lys Val Ser Pro Lys Asp Asn Pro Lys Pro
 145 150 155 160
 Cys Phe Lys Ala His Leu Lys Thr Arg Ser Lys Ile Thr Thr Leu Pro
 165 170 175
 Lys Phe Thr Lys Lys Thr His Leu Gly Leu Ser Ala Ala Lys Ala Lys

180	185	190
Ser Lys Thr Lys Leu Gly Pro	Gly Glu Lys Thr Leu Lys Asp Ser Arg	
195	200	205
Ser Lys Thr Ala Ile Gly Leu	Ser His Ile Met Ser Ala Gly Asp Ala	
210	215	220
Lys Asn Leu Leu Asp Thr Lys Leu Pro Thr Ser Glu Leu Lys Ile Tyr		
225	230	235
Ala Lys Asp Ile Ile Ile Asn Ile Leu Glu Thr Ile Val Lys Glu Phe		
245	250	255
Gly Lys Val Lys Gln Thr Lys Ala Leu Pro Ser Asp Gln Ile Ile Ala		
260	265	270
Ala Gly Lys Ile Val Asn Thr Val Leu Gln Glu Leu Tyr Val Thr Asn		
275	280	285
Asn Cys Asn Leu Ala Tyr Pro Met Lys Ser Ser His Leu Arg Leu Ser		
290	295	300
Gln Gly Asn Ile Gly Ile Gly Ser Leu Pro Lys Gln Gln Ala Cys Phe		
305	310	315
Tyr Leu Glu Asn Val Ser Ser Gln Leu Glu His Ile Phe Pro Arg Glu		
325	330	335
Gly Ile Phe Lys Lys Leu Phe Asp Lys Trp Gln Thr Glu Ser Asn Asp		
340	345	350
Lys Glu Asn Glu Lys Cys Lys Leu Leu Met Ile Ala Glu Asn Val Leu		
355	360	365
Thr Glu Ile Ser Ile Lys Ala Lys Glu Leu Glu Tyr Ser Leu Ser Leu		
370	375	380
Leu Asn Leu Pro Pro Leu Glu Asn Cys Glu Ser Arg Leu Tyr Asn His		
385	390	395
Phe Glu Gly Ala Ser Thr Arg Ala Glu Asp Thr Lys Ala Gln Ile Asn		
405	410	415
Met Phe Gly Arg Glu Ile Val Glu Met Leu Leu Glu Lys Leu Gln Leu		
420	425	430
Cys Phe Leu Ser Gln Ile Pro Thr Pro Asp Ser Glu Glu Thr Leu Ser		
435	440	445
Asn Ser Lys Glu His Ile Thr Ala Lys Ser Lys Tyr Gly Phe Pro Asn		
450	455	460
Lys His Ser Leu Ser Ser Leu Pro Ile Tyr Asn Thr Lys Thr Lys Asp		

465 470 475 480
 Gln Ile Ser Val Gly Ser Ser Asn Gln Ile Val Gln Glu Ile Val Glu
 485 490 495
 Thr Val Leu Asn Met Leu Glu Ser Phe Val Asp Leu Gln Phe Lys His
 500 505 510
 Ile Ser Lys Tyr Glu Phe Ser Glu Ile Val Lys Met Pro Ile Glu Asn
 515 520 525
 Leu Ser Ser Ile Gln Gln Lys Leu Leu Asn Lys Lys Met Leu Pro Lys
 530 535 540
 Leu Gln Pro Leu Lys Met Phe Ser Asp Lys Ser Glu Ser Asn Thr Ile
 545 550 555 560
 Asn Phe Lys Glu Asn Ile Gln Asn Ile Leu Leu Arg Val His Ser Phe
 565 570 575
 His Ser Gln Leu Leu Thr Tyr Ala Val Asn Ile Ile Ser Asp Met Leu
 580 585 590
 Ala Val Ile Lys Asn Lys Leu Asp Asn Glu Ile Ser Gln Met Glu Pro
 595 600 605
 Ser Ser Ile Ser Ile Leu Lys Glu Asn Ile Val Ala Ser Glu Ile Ile
 610 615 620
 Gly Thr Leu Met Asp Gln Cys Thr Tyr Phe Asn Glu Ser Leu Ile Gln
 625 630 635 640
 Asn Leu Ser Arg Glu Ser Leu Phe Gln Gly Ala Glu Asn Ala Tyr Thr
 645 650 655
 Val Asn Gln Val Glu Leu Ala Thr Asn Met Lys Met Phe Thr Ser Lys
 660 665 670
 Leu Lys Glu Gly Ser Leu Gly Ile Asn Pro Ser Gln Val Ser Lys Thr
 675 680 685
 Gly Phe Val Phe Cys Ser Asp Glu Asp Met Lys Glu Lys Tyr Arg Val
 690 695 700
 Ser Ser Asp Leu Pro Thr Ser Val Arg Ser Ser Val Glu Asp Thr Val
 705 710 715 720
 Lys Asn Ser Glu Pro Thr Lys Arg Pro Asp Ser Glu Thr Met Pro Ser
 725 730 735
 Cys Ser Thr Arg Asn Lys Val Gln Asp His Arg Pro Arg Glu Ser Asn
 740 745 750
 Phe Gly Ser Phe Asp Gln Thr Met Lys Gly Asn Ser Tyr Leu Pro Glu

755	760	765
Gly Ser Phe Leu Gln Lys Leu Leu Arg Lys Ala Ser Asp Ser Thr Glu		
770	775	780
Ala Ala Leu Lys Gln Val Leu Ser Phe Ile Glu Met Gly Lys Gly Glu		
785	790	795
Asn Leu Arg Val Phe His Tyr Glu Asn Leu Lys Pro Val Val Glu Pro		
805	810	815
Asn Gln Ile Gln Thr Thr Ile Ser Pro Leu Lys Ile Cys Leu Ala Ala		
820	825	830
Glu Asn Ile Val Asn Thr Val Leu Ser Ser Cys Gly Phe Pro Ser Gln		
835	840	845
Pro His Thr Asn Glu Asn Arg Glu Ile Met Lys Pro Phe Phe Ile Ser		
850	855	860
Lys Gln Ser Ser Leu Ser Glu Val Ser Gly Gly Gln Lys Asp Asn Glu		
865	870	875
Lys Ser Leu Leu Arg Met Gln Asp Lys Lys Ile Asn Tyr Ile Pro Glu		
885	890	895
Glu Glu Asn Glu Asn Leu Glu Ala Ser Arg Glu Asp Ser Ser Phe Leu		
900	905	910
Gln Lys Leu Lys Lys Lys Glu Tyr Pro Lys Ile Glu Thr Val Lys Glu		
915	920	925
Val Glu Ala Phe Thr Phe Ala Asp His Glu Met Gly Ser Asn Glu Val		
930	935	940
His Leu Ile Ala Arg His Val Thr Thr Ser Val Val Thr Tyr Leu Lys		
945	950	955
Asn Phe Glu Thr Thr Gly Arg Cys		
965		

<210> 3957

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3957

Met Ala Ser Leu Ser Gly Pro Pro Cys Ala Ser Thr Leu Gln Pro Met

1	5	10	15
Ser	Ala	Thr	His
Ser	Arg	Gly	Pro
Trp	Thr	Trp	Pro
Pro	Pro	Ala	Gly
Ala			
20	25	30	
Val	Leu	Ser	Asp
Pro	Ser	Phe	Ser
Leu	Ser	Pro	Phe
Ser	Ala	Ala	Ser
35	40	45	
Ser	Ser	Pro	Gly
Ser	Ile	Leu	Ser
Leu	Asn	Ser	Met
Thr	Gln	Leu	Pro
50	55	60	
Pro	Leu	Ser	Pro
Lys	Ser	Arg	Leu
Leu	Leu	Leu	Trp
Pro	Phe	Pro	Leu
Ser			
65	70	75	80
Leu	Lys	Pro	Ala
Ser	Val	Trp	Thr
Gln	Leu	Leu	Pro
Ser	Pro	His	Ser
85	90	95	
Arg	Arg	Gly	Cys
Ser	Ala	Leu	Leu
Glu	Arg	Pro	Pro
Pro	Pro	Leu	Asn
Ser			
100	105	110	
Ala	His	Gln	Thr
Ser	Thr	Ile	Gln
Pro	Leu	Arg	Gly
Pro	Gln	Ser	Tyr
115	120	125	
Leu	Ala	Ile	Gly
Leu	Leu	Ala	Pro
Asn	His	Leu	Pro
Leu	Pro	Ser	Ser
130	135	140	
Ser	Ser	Ser	Ser
Leu	His	His	Phe
Leu	Ile	Thr	Ser
Asp	Leu	Ser	Ser
145	150	155	160
Ser	Ala	Glu	Asp
Leu	Ser	Pro	Ser
Val	Tyr	Thr	Glu
Trp	Pro	Leu	Ala
165	170	175	
Glu	Asn	Pro	Pro
180			

<210> 3958

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3958

Met	Glu	Val	Thr	Leu	Leu	Val	Lys	Gly	Glu	Pro	Pro	Pro	Cys	His	His
1	5	10	15												
Asp	Ser	Ser	Gly	Pro	Gly	His	Cys	Pro	Gln	Phe	Gln	Gly	Lys	Lys	Gln
20	25	30													
Met	Ser	Gly	Ala	Arg	Ala	Arg	Ala	Gln	His	Gln	Ala	His	Ser	Ser	Gln

35 40 45
 Glu Ser Thr Gln Cys Gln Val Ser Pro Cys Pro Ala Trp His Pro Arg
 50 55 60
 Ala Gly Cys Ser Ser His Gly Thr Asp Gly Asn Ala Lys Ala His Arg
 65 70 75 80
 Glu Ala Leu Ala Pro His Cys Pro Val Pro Pro Pro Pro His Ala Pro
 85 90 95
 Glu Arg Pro Gly Pro Cys Leu Gln Ala Pro Ala Ser Ala Pro Arg Arg
 100 105 110
 Glu Ala Cys Pro Ala Thr Leu Val Leu Lys Ser His Pro Trp Leu Pro
 115 120 125
 Val Pro Gly Lys Gln Val Gly Ser Thr Lys Pro Arg Val Pro Ala Thr
 130 135 140
 Leu Cys Thr Asp Ala Asp Phe Leu Cys Thr Leu Gly Cys Leu Leu Pro
 145 150 155 160
 His

<210> 3959

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3959

Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr
 1 5 10 15
 Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu
 20 25 30
 Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly Val Pro Leu Leu Arg
 35 40 45
 Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln Gln Ile Ala Leu His
 50 55 60
 Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala Cys Arg Cys Gly Ser
 65 70 75 80

Cys His Gly Gly Asp Phe Val Pro Phe His His Phe Ala Val Cys Ser
 85 90 95
 Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr
 100 105 110
 Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys Leu Gln Leu Pro Ser
 115 120 125
 Pro Gln Glu Gln Arg Lys Ser Ser
 130 135

<210> 3960

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3960

Met Thr Asn Ser Thr Val Pro Asp Val Leu Cys Ile Gly Pro Pro Glu
 1 5 10 15
 Tyr Gln Glu Lys Lys Leu Asn Asp Val Thr Ser Phe Asp Tyr Glu Cys
 20 25 30
 Thr Thr Thr Asp Phe Val Val His Gln Thr Leu Pro Tyr Gln Ser Val
 35 40 45
 Ser Val Asp Thr Phe Asn Ser Lys Asn Asp Val Tyr Val Ala Ile Ala
 50 55 60
 Gln Pro Ser Met Glu Asn Cys Met Val Leu Glu Trp Asp His Ile Glu
 65 70 75 80
 Met Asn Phe Arg Ser Tyr Asp Asn Ile Thr Gly Gln Ser Ile Val Gly
 85 90 95
 Cys Lys Ala Ile Leu Ile Asp Asp Gln Val Phe Val Val Val Ala Gln
 100 105 110
 Leu Phe Gly Gly Ser His Ile Tyr Lys Tyr Asp Glu Ser Trp Thr Lys
 115 120 125
 Phe Val Lys Phe Gln Asp Ile Glu Val Ser Arg Ile Ser Lys Pro Asn
 130 135 140
 Asp Ile Glu Leu Phe Gln Ile Asp Asp Glu Thr Phe Phe Val Ile Ala
 145 150 155 160

Asp Ser Ser Lys Ala Gly Leu Ser Thr Val Tyr Lys Trp Asn Ser Lys
 165 170 175
 Gly Phe Tyr Ser Tyr Gln Pro Leu Pro Gly Pro His His Pro Pro Val
 180 185 190
 Glu

<210> 3961

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3961

Met Val Arg Gly Ala Gly Pro Gly Pro Ser Leu Ser Ala Leu Ser His
 1 5 10 15
 Pro Thr Gly Ala Ser Gly Met Ala Ala Ala Glu Gly Pro Gly Tyr Leu
 20 25 30
 Val Ser Pro Gln Ala Glu Lys His Arg Arg Ala Arg Asn Trp Thr Asp
 35 40 45
 Ala Glu Met Arg Gly Leu Met Leu Val Trp Glu Glu Phe Phe Asp Gly
 50 55 60
 Leu Lys Gln Thr Lys Arg Asn Ala Lys Val Tyr Glu Lys Met Ala Ser
 65 70 75 80
 Lys Leu Phe Glu Met Thr Gly Glu Arg Arg Leu Gly Glu Glu Ile Lys
 85 90 95
 Ile Lys Ile Thr Asn Met Thr Phe Gln Tyr Arg Lys Leu Lys Cys Met
 100 105 110
 Thr Asp Ser Glu Ser Ala Pro Pro Asp Trp Pro Tyr Tyr Leu Ala Ile
 115 120 125
 Asp Gly Ile Leu Ala Lys Val Pro Glu Ser Cys Asp Gly Lys Leu Pro
 130 135 140
 Asp Ser Gln Pro Pro Gly Pro Ser Thr Ser Gln Thr Glu Ala Ser Leu
 145 150 155 160
 Ser Pro Pro Ala Lys Ser Thr Pro Leu Tyr Phe Pro Tyr Asn Gln Cys
 165 170 175

Ser Tyr Glu Gly Arg Phe Glu Asp Asp Arg Ser Asp Ser Ser Ser Ser
 180 185 190
 Leu Leu Ser Leu Lys Phe Arg Ser Glu Glu Arg Pro Val Lys Lys Arg
 195 200 205
 Lys Val Gln Ser Cys His Leu Gln Lys Lys Gln Leu Arg Leu Leu Glu
 210 215 220
 Ala Met Val Glu Glu Gln Arg Arg Leu Ser Arg Ala Val Glu Glu Thr
 225 230 235 240
 Cys Arg Glu Ile Ser Arg Cys Tyr Ser Thr Val Cys Arg Arg Gly Cys
 245 250 255
 Pro Val Ala Met Glu Trp Leu Trp Thr Leu Ser
 260 265

<210> 3962

<211> 238

<212> PRT

<213> Homo sapiens

<400> 3962

Met Pro Gly Arg Thr Gly Leu Ala Gly Glu Met Pro Val Gly Trp Gly
 1 5 10 15
 Pro Gly Arg Ala Gly Ala Ser Glu Pro Asn Glu Ser Thr Cys Ala Pro
 20 25 30
 Glu Ala Leu Asp Gly His Leu Gly Val Ala Arg Arg Glu Gly Pro Ile
 35 40 45
 Leu Gly Thr Leu Leu Gly Arg Gly Lys Gly His Cys Gln Ala Leu Ser
 50 55 60
 Gln Leu Gly His Cys Pro Ser Pro Ala Trp Asn Asn Tyr Ser Gly Met
 65 70 75 80
 Met Asp Ile Gly Val Ala Pro Ser Arg Val Gly Pro Ser Gly His Cys
 85 90 95
 Gly Val Leu Arg Ser His Ser Arg Pro Gly Glu Leu Ala Val Val Met
 100 105 110
 Asn His Lys Val Pro Arg His Arg Pro Val Ser Ser Val Gly Thr Glu
 115 120 125

Leu Leu Trp Val Arg Cys Ala Pro Lys Met Val Gln Leu Pro Ile Cys
 130 135 140
 Cys Leu Leu Leu Thr Pro Ala Pro Gly Ile Gly Pro Arg Ala His Gly
 145 150 155 160
 His Leu His Thr Asn Leu Glu Thr Arg Gly Leu Pro Arg Gly Thr Arg
 165 170 175
 Glu Ser Gln Gln Ala Glu Gly Glu Gly Glu Ala Ile Gln Glu Gly Arg
 180 185 190

Gly Ala Cys Lys Arg Ala Gln Arg Lys Glu Gly Glu Gly Pro Arg Gly
 195 200 205
 Pro Cys Val Val Arg Ala Gly Gly Val Gly Trp Gly Thr Arg Gln Val
 210 215 220
 Ala Gly Glu Pro Pro Leu Val Asp Cys Ser Thr Ala Gly Thr
 225 230 235

<210> 3963

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3963

Met Arg Met Ala Pro Thr Glu Ser Thr Glu Gly Arg Arg Leu Trp Pro
 1 5 10 15
 Gly Pro Arg Glu Gly Gly Ser Gly Lys Glu Thr Thr Ser Glu Lys Leu
 20 25 30
 Ser Asn Leu Pro Arg Pro His Ser Tyr Ser Pro Lys Arg Ala Asp Ala
 35 40 45
 Glu Ser Phe Arg Gly Val Pro Ala Ala Phe Lys Lys Cys Arg Glu Val
 50 55 60
 Phe Arg Ala Cys Trp Gly Ser Arg Glu Leu Leu Phe Leu Phe Lys Ala
 65 70 75 80
 Ile Ser Glu Ala Gly Pro Ala Gln Asn Ser Cys Gly Ile Thr Leu Glu
 85 90 95
 Lys Ala Gly Gly Leu Glu Asp Thr Gly Ser His Trp Leu Ser Trp Ala

100	105	110
Arg Cys Lys Val Leu Tyr Ile Asn Gly Phe Thr Asp Pro Trp Lys Asp		
115	120	125
Ala Gln Ala Trp Ile Leu Ile Val Ser Cys Lys Lys Gly Lys Gly Thr		
130	135	140
Pro Glu Arg Glu Gly Arg Asn		
145	150	

<210> 3964

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3964

Met Pro Trp Gly Gly Val Gly Ala Gln Pro Pro Leu Phe Tyr Leu Leu		
1	5	10
Gly Lys Gly Leu Gln Trp Gly Leu Glu Tyr Arg Gly Phe His Gly Ser		
20	25	30
Pro Gly Asp Pro Glu His Phe Tyr Ser Phe Tyr Gln Asp Lys Glu Gly		
35	40	45
Leu Cys Ile Arg Leu Ser Thr Leu Asn Trp Phe Leu Trp Cys Phe Ile		
50	55	60
Asp Glu Ile Arg Met His Arg Arg Pro Gln Ala Arg Tyr Leu Leu Ser		
65	70	75
Pro Gln Cys Ser Ala Pro Pro Ala Gln Gly Ser Gly Phe Pro Arg Arg		
85	90	95
Thr Gln Leu Thr Pro Thr Pro Gln Glu Ala Gln Ala Gly Leu Cys Arg		
100	105	110
Ala His Lys Pro Gly Pro Val		
115		

<210> 3965

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3965

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Met Arg Phe Pro Ser Pro Gly Pro Val Lys Asn Val Asp Gly Asp Trp
 1              5              10              15
Thr Thr Val Lys Met Gln Val Tyr Gln Asp Ala Pro Ser Thr Thr Leu
      20              25              30
Cys Ala Gly Pro Gly Pro Thr Tyr Leu Gln Pro Leu Ala Val Leu Arg
      35              40              45
Gly Arg Cys His Pro Ser Cys Leu Gln Arg Ser Arg His Ser Gln Leu
      50              55              60
Arg Arg Thr Val Ala Glu Gln Ile Leu His Leu Phe Thr Gly Val Leu
      65              70              75              80
His Arg Asn Ala Ile Phe Leu Leu Val Ser Val Ala Ser His Ser Glu
      85              90              95
Val Arg Arg Gly Asp
      100

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<210> 3966

<211> 1197

<212> PRT

<213> Homo sapiens

<400> 3966

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Met Ser Asp Glu Asn Met Ser Lys Thr Gln Thr Val Tyr Asp Ser Asp
 1              5              10              15
Ser Gln Ser Gly Ser Ser Ala Lys Glu Lys Asp Arg Gly Ala Asn Leu
      20              25              30
Cys Val Met Asp His Phe Met Lys Ile Phe Leu Tyr Cys Arg Arg Ala
      35              40              45
Met Val Leu Ala His Arg Gly Gly Tyr Trp Thr Leu Leu Gln Asn Cys
      50              55              60
Cys Arg Ala Leu Trp Asn Phe Thr Gln Glu Leu Gln Ile Leu Leu Lys
      65              70              75              80
Gln Ala Val Asp Leu Asp Lys Thr Phe Pro Ile Ser Gln Asp Gly Phe

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	85	90	95
Phe Cys Thr Ser Val Leu Pro Phe Tyr Leu Gly Ala Glu Leu Leu Ile			
	100	105	110
Asp Met Leu Ile Gln Leu Gln Asn Thr Ser Ser Ile Lys Pro Ile Glu			
	115	120	125
Asp Lys Gly Glu Phe Ser Val Pro Ser Cys Tyr Gly Asn Ile Lys Asn			
	130	135	140
Asp Asn Gly Gly Ser Ser Leu Thr Phe Glu His Pro Leu Asp Asp Val			
145	150	155	160
Asn Val Val Asp Leu Lys Trp Ile His Asp Phe Val Leu Lys Ser Leu			
	165	170	175
Glu Val Leu Tyr Gln Val Glu Lys Trp Glu Thr Leu Val Ser Leu Ala			
	180	185	190
Ile Gln Phe Asn Thr Val Ser His Glu Arg Tyr Thr Glu Gln Val Thr			
	195	200	205
Pro Leu Leu Val Tyr Ala Gln Arg Gln Leu Leu Leu Arg Ile Gln Lys			
	210	215	220
Phe Lys Gly Pro Asp Ile Thr Gln Gln Pro Cys Ala Arg Tyr Glu Ala			
225	230	235	240
Glu Tyr Gly Glu Lys Ile Thr Cys Arg Asn Phe Ile Gly Lys Gln Leu			
	245	250	255
Lys Ile Asn Ser Ser Thr Ile Glu Ala Thr Ser Asn Cys Thr Asp Leu			
	260	265	270
Leu Lys Met Leu Ile Ser Ser Glu Tyr Ser Arg Ala Lys Ala Leu Val			
	275	280	285
Cys Val Pro Val Asp Val Thr Asp Thr Leu Arg Cys Phe Arg Glu Thr			
	290	295	300
Leu Glu Lys Ser Lys Tyr His Asn Arg Ser Ile Arg His Ser Arg Lys			
305	310	315	320
Leu Leu Ser Leu Phe Leu Ala Gln Thr Gln Asp Val Leu Gln Ala Ser			
	325	330	335
Asn Gln Arg Ser Leu Lys Val Gln Ala Leu His Ser Leu Gly Ser Leu			
	340	345	350
Leu Ile Phe Ala Glu Lys Lys Arg Ala Ala Phe Lys Cys Trp Cys Gln			
	355	360	365
Ala Leu Asp Asp Ile Phe Arg Lys Pro Asp Val Leu His Thr Trp Lys			

370	375	380	
Glu Phe Gly Pro Ser Leu Thr Asn Val Thr Asn Ser His Ser Pro Pro			
385	390	395	400
Gly Phe Lys Asp Tyr Ser Glu Glu Phe Leu Ser Arg Val Gly Ile Trp			
405	410	415	
Gly Cys Leu Gln Gly Ala Val Ile Ser Ala Lys Ile Ala Gln Phe Ile			
420	425	430	
Lys Ser Leu Asn Val Glu Lys Lys Thr Asp Cys Cys Ile Leu Ser Ala			
435	440	445	
Leu Leu Phe Gln Gly Leu Leu Arg Thr Thr Leu Pro His Pro Lys Ala			
450	455	460	
Glu Arg Cys Tyr Ala Gln Tyr Glu Ile Thr Gln Leu Leu Pro Gly Ile			
465	470	475	480
Glu Leu Phe Ser Asp Arg Tyr Arg Ala Asp Ile Cys Ser Val Ile Ala			
485	490	495	
Ser Leu Tyr Tyr Ile Ile Arg Glu Leu His Phe Val Arg Gln Asn Leu			
500	505	510	
Ile Val Leu Pro Leu Leu Ala Leu Tyr Gln Tyr Phe Val Ser Gly Ile			
515	520	525	
Cys Gln Asp Ile Thr Arg Asn Leu Glu Ala Arg Ile Leu Lys Ile Glu			
530	535	540	
Val Leu Ile Asp Leu Arg Phe Phe Ser Glu Ala Phe Tyr Glu Ile Ser			
545	550	555	560
Gln Ile Phe Tyr Gly Lys Asn Met Pro Cys Pro Ile Pro Ala Gly Tyr			
565	570	575	
Lys Ala Thr Gly Lys Met Lys Ile Phe Gln Ser Phe Asp Ser Gly Lys			
580	585	590	
Pro Leu Thr Ser Lys Glu Asn Ile Gln Ala Ile Asp Glu Leu Arg Asn			
595	600	605	
Lys Gly Leu Pro Ala Val Leu Val Thr Ile Gly Gln Pro His Leu Leu			
610	615	620	
Asn Lys Phe Asn Phe Val Lys Ala Tyr Phe Phe Leu Ser Val Ala Ala			
625	630	635	640
Thr Ile Asn Cys Val Pro Glu Asn Lys Phe Lys Thr Val Ile Thr Asn			
645	650	655	
Lys Ser Lys Pro Asn Leu Pro Asn Leu Lys Glu Ile Tyr Ser Lys Asp			

660	665	670
Asp Gly Ser Ser Phe Tyr Asn Leu Thr Lys Leu Lys Asp Glu Ile Thr		
675	680	685
Leu Ser Met Leu Lys Ser Met Leu Leu Met Glu Ala Glu Asp Arg Leu		
690	695	700
Asn Phe Leu Leu Ser Glu Val Glu Gln Lys Thr Leu Ser Gln Cys Ser		
705	710	715
Ala Gly Glu Leu Glu Ile Val Val Glu Ala Arg Leu Gln Leu Ala Ala		
725	730	735
Val Ala Leu Gln Arg His Arg Ala Ala Tyr Ser Ala Ala Ile Val Phe		
740	745	750
Ser Thr Leu Thr Leu Leu Gln Asp Ser Lys Leu Phe Glu Lys Lys Val		
755	760	765
Val Gln Asp Asp Thr Glu Asn Pro Val Ser Pro Gly Thr Ser Val Thr		
770	775	780
Glu Asn Lys Asp Asp Asn Glu Phe Leu Asp Pro Ile Ser Leu Asn Ala		
785	790	795
Arg Glu Tyr Phe Asn Ile His Leu Trp Leu Arg Cys Arg Leu Ala Leu		
805	810	815
Val Thr Ala Phe Val Ala Gln Ile His Gly Ile Gly Ile Val Lys Glu		
820	825	830
Asp Asp Met Thr Asp Cys Leu Ser Leu Ile Asn Glu Val Cys Met Glu		
835	840	845
Ala Lys Ser Ala Gly Asp Thr Glu Leu Gln Ala Glu Phe Leu Thr Gln		
850	855	860
Ala Val Ile Leu Gly Leu Gln Glu Lys His Leu Lys Ala Asp Ile Met		
865	870	875
Thr Asn Leu Gln Asp Ile Ile His Leu Leu Glu Gly Asn Glu Phe Ile		
885	890	895
Ser Pro Gln Ser Arg Leu Thr Leu Ala Arg Ser Leu Val Leu Leu Asp		
900	905	910
Asp Leu Thr Lys Ala Glu Lys Phe Lys Glu Ser Pro Ser Ser Lys Thr		
915	920	925
Gly Lys Leu Asn Leu Leu Thr Arg Ala His Ser Ile Leu Thr Glu Gln		
930	935	940
Met Leu Ala Phe Gly Glu Thr Ile Glu Phe Arg Ser Ser Asn Thr Lys		

945 950 955 960
 Tyr Ala Asn Pro Leu Gln Pro Leu Lys Asn Ile Tyr Leu Pro His Val
 965 970 975
 Met Leu Leu Ala Lys Ile Lys Met Arg Ile Gly His Thr Val Ala Lys
 980 985 990
 Gln Val Tyr Tyr Lys Asn Lys Arg Lys Asp Pro Ser Lys Trp Leu Pro
 995 1000 1005
 Ala Leu His Leu Phe Asp Val Ala Leu Lys Leu Cys Arg Thr Thr Ala
 1010 1015 1020
 Val Glu Glu His Glu Val Glu Ala Glu Ile Leu Phe Gln Lys Gly Lys
 1025 1030 1035 1040
 Ile Glu Arg Gln Ile Leu Met Glu Glu Lys Ser Pro Ser Phe Gln Leu
 1045 1050 1055
 Glu Ser Leu Tyr Glu Ala Ile Gln Leu Ser Leu Lys Asn Asp Gln Asn
 1060 1065 1070
 Ser Gly Leu Ile Arg Asp Ser Tyr Leu Glu Met Ala Leu Leu Tyr Phe
 1075 1080 1085
 His Leu Lys Lys Pro Lys Ile Lys Ile Ser Gly Ser Pro Leu Thr Leu
 1090 1095 1100
 Lys Pro Pro Leu Arg Arg Ser Ser Ser Val Lys Glu Thr Ser Ala Asn
 1105 1110 1115 1120
 Lys Phe Glu Met Tyr Ser Ser Leu Ala Trp Ile Ala Ile Arg Ala Ala
 1125 1130 1135
 Ala Gln Val Ser Glu Ala Val Leu Ala Ile Asn Leu Leu Ile Gly Lys
 1140 1145 1150
 Lys Asn Thr Arg Met His Lys Val Asn Gln Val Ala Leu Pro Asn Ile
 1155 1160 1165
 Pro Glu Phe Ala Ala Leu Asp Leu Leu Ser Ser Tyr Thr Asp Tyr Leu
 1170 1175 1180
 Leu Gly Met Phe Gly Cys Leu His Ile Met Gln Lys Asn
 1185 1190 1195

<210> 3967

<211> 510

<212> PRT

<213> Homo sapiens

<400> 3967

Met Val Gly Met Phe Cys Phe Leu Ile Phe Leu Gln Ser Leu Leu Gly
 1 5 10 15
 Phe Gly Thr Lys Ala Val Leu Ala Ser Gln Arg Val Gly Lys Cys Cys
 20 25 30
 Ser Phe Leu Leu Ala Arg Asn Thr Met Ala Gly Thr Arg Arg Val Glu
 35 40 45
 Gly Gln Val Gly Gly Arg Pro Gly Gly Pro Gly Cys Ser Leu Met Pro
 50 55 60
 Pro Pro Pro Gln Glu Cys Ala Gly Glu Pro Leu Phe Met Leu Tyr Cys
 65 70 75 80
 Ala Ile Lys Gln Gln Met Glu Lys Gly Pro Ile Asp Ala Ile Thr Gly
 85 90 95
 Glu Ala Arg Tyr Ser Leu Ser Glu Asp Lys Leu Ile Arg Gln Gln Ile
 100 105 110
 Asp Tyr Lys Thr Leu Thr Leu Asn Cys Val Asn Pro Glu Asn Glu Asn
 115 120 125
 Ala Pro Glu Val Pro Val Lys Gly Leu Asp Cys Asp Thr Val Thr Gln
 130 135 140
 Ala Lys Glu Lys Leu Leu Asp Ala Ala Tyr Lys Gly Val Pro Tyr Ser
 145 150 155 160
 Gln Arg Pro Lys Ala Ala Asp Met Asp Leu Glu Trp Arg Gln Gly Arg
 165 170 175
 Met Ala Arg Ile Ile Leu Gln Asp Glu Asp Val Thr Thr Lys Ile Asp
 180 185 190
 Asn Asp Trp Lys Arg Leu Asn Thr Leu Ala His Tyr Gln Val Thr Asp
 195 200 205
 Gly Ser Ser Val Ala Leu Val Pro Lys Gln Thr Ser Ala Tyr Asn Ile
 210 215 220
 Ser Asn Ser Ser Thr Phe Thr Lys Ser Leu Ser Arg Tyr Glu Ser Met
 225 230 235 240
 Leu Arg Thr Ala Ser Ser Pro Asp Ser Leu Arg Ser Arg Thr Pro Met
 245 250 255

Ile Thr Pro Asp Leu Glu Ser Gly Thr Lys Leu Trp His Leu Val Lys
 260 265 270
 Asn His Asp His Leu Asp Gln Arg Glu Gly Asp Arg Gly Ser Lys Met
 275 280 285
 Val Ser Glu Ile Tyr Leu Thr Arg Leu Leu Ala Thr Lys Gly Thr Leu
 290 295 300
 Gln Lys Phe Val Asp Asp Leu Phe Glu Thr Ile Phe Ser Thr Ala His
 305 310 315 320
 Arg Gly Ser Ala Leu Pro Leu Ala Ile Lys Tyr Met Phe Asp Phe Leu
 325 330 335
 Asp Glu Gln Ala Asp Lys His Gln Ile His Asp Ala Asp Val Arg His
 340 345 350
 Thr Trp Lys Ser Asn Cys Leu Pro Leu Arg Phe Trp Val Asn Val Ile
 355 360 365
 Lys Asn Pro Gln Phe Val Phe Asp Ile His Lys Asn Ser Thr Thr Asp
 370 375 380
 Ala Cys Leu Ser Val Val Ala Gln Thr Phe Met Asp Ser Cys Ser Thr
 385 390 395 400
 Ser Glu His Lys Leu Gly Lys Asp Ser Pro Ser Asn Lys Leu Leu Tyr
 405 410 415
 Ala Lys Asp Ile Pro Asn Tyr Lys Ser Trp Val Glu Arg Tyr Tyr Ala
 420 425 430
 Asp Ile Ala Lys Met Pro Ala Ile Ser Asp Gln Asp Met Ser Ala Tyr
 435 440 445
 Leu Ala Glu Gln Ser Arg Leu His Leu Ser Gln Phe Asn Ser Met Ser
 450 455 460
 Ala Leu His Glu Ile Tyr Ser Tyr Ile Thr Lys Tyr Lys Asp Glu Ile
 465 470 475 480
 Leu Ala Ala Leu Glu Lys Asp Glu Gln Ala Arg Arg Gln Arg Leu Arg
 485 490 495
 Ser Lys Leu Glu Gln Val Val Asp Thr Met Ala Leu Ser Ser
 500 505 510

<210> 3968

<211> 1078

<212> PRT

<213> Homo sapiens

<400> 3968

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Met Ser Ser Ser Asp Gly Lys Val Leu Pro Leu Asn Val Gln Val Val
  1             5             10             15
Thr Gln His Met Gln Ser Val Lys Gln Ala Pro Lys Thr Pro Gln Asn
      20             25             30
Val Pro Ala Ser Pro Gly Gly Asp Arg Ser Ala Arg His Arg Tyr Pro
      35             40             45
Gln Ile Leu Pro Lys Pro Ala Asn Thr Ser Ala Leu Thr Ile Arg Ser
      50             55             60
Pro Thr Thr Val Leu Phe Thr Ser Ser Pro Ile Lys Thr Ala Val Val
      65             70             75             80
Pro Ala Ser His Met Ser Ser Leu Asn Val Val Lys Met Thr Thr Ile
      85             90             95
Ser Leu Thr Pro Ser Asn Ser Asn Thr Pro Leu Lys His Ser Ala Ser
      100            105            110
Val Ser Ser Ala Thr Gly Thr Thr Glu Glu Ser Arg Ser Val Pro Gln
      115            120            125
Ile Lys Asn Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser
      130            135            140
Ser Ser Ala Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu
      145            150            155            160
Thr Ser Ser Asp Glu His Pro Val Gln Cys Gln Glu Asn Ser Asp Glu
      165            170            175
Ala Lys Ala Pro Gln Thr Pro Ser Ala Leu Leu Gly Gln Lys Ser Asn
      180            185            190
Thr Asp Gly Ala Leu Gln Lys Pro Ser Asn Glu Gly Val Ile Glu Ile
      195            200            205
Lys Ala Thr Lys Val Cys Asp Gln Arg Thr Lys Cys Lys Ser Arg Cys
      210            215            220
Asn Lys Met Leu Pro Gly Thr Ser Thr Gly Asn Asn Gln Ser Thr Ile
      225            230            235            240
Thr Leu Ser Val Ala Ser Gln Asn Leu Thr Phe Thr Ser Ser Ser Ser
      245            250            255

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Pro Pro Asn Gly Asp Ser Ile Asn Lys Asp Pro Lys Leu Cys Thr Lys
 260 265 270
 Ser Pro Arg Lys Arg Leu Ser Ser Thr Leu Gln Glu Thr Gln Val Pro
 275 280 285
 Pro Val Lys Lys Pro Ile Val Glu Gln Leu Ser Ala Ala Thr Ile Glu
 290 295 300
 Gly Gln Lys Gln Gly Ser Val Lys Lys Asp Gln Lys Val Pro His Ser
 305 310 315 320
 Gly Lys Thr Glu Gly Ser Thr Ala Gly Ala Gln Ile Pro Ser Lys Val
 325 330 335
 Ser Val Asn Val Ser Ser His Ile Gly Ala Asn Gln Pro Leu Asn Ser
 340 345 350
 Ser Ala Leu Val Ile Ser Asp Ser Ala Leu Glu Gln Gln Thr Thr Pro
 355 360 365
 Ser Ser Ser Pro Asp Ile Lys Val Lys Leu Glu Gly Ser Val Phe Leu
 370 375 380
 Leu Asp Ser Asp Ser Lys Ser Val Gly Ser Phe Asn Pro Asn Gly Trp
 385 390 395 400
 Gln Gln Ile Thr Lys Asp Ser Glu Phe Ile Ser Ala Ser Cys Glu Gln
 405 410 415
 Gln Gln Asp Ile Ser Val Met Thr Ile Pro Glu His Ser Asp Ile Asn
 420 425 430
 Asp Leu Glu Lys Ser Val Trp Glu Leu Glu Gly Met Pro Gln Asp Thr
 435 440 445
 Tyr Ser Gln Gln Leu His Ser Gln Ile Gln Glu Ser Ser Leu Asn Gln
 450 455 460
 Ile Gln Ala His Ser Ser Asp Gln Leu Pro Leu Gln Ser Glu Leu Lys
 465 470 475 480
 Glu Phe Glu Pro Ser Val Ser Gln Thr Asn Glu Ser Tyr Phe Pro Phe
 485 490 495
 Asp Asp Glu Leu Thr Gln Asp Ser Ile Val Glu Glu Leu Val Leu Met
 500 505 510
 Glu Gln Gln Met Ser Met Asn Asn Ser His Ser Tyr Gly Asn Cys Leu
 515 520 525
 Gly Met Thr Leu Gln Ser Gln Ser Val Thr Pro Gly Ala Pro Met Ser
 530 535 540

Ser His Thr Ser Ser Thr His Phe Tyr His Pro Ile His Ser Asn Gly
 545 550 555 560
 Thr Pro Ile His Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro
 565 570 575
 Thr Pro Thr Pro Thr Pro Thr Ser Glu Met Ile Ala Gly Ser Gln Ser
 580 585 590
 Leu Ser Arg Glu Ser Pro Cys Ser Arg Leu Ala Gln Thr Thr Pro Val
 595 600 605
 Asp Ser Ala Leu Gly Ser Ser Arg His Thr Pro Ile Gly Thr Pro His
 610 615 620
 Ser Asn Cys Ser Ser Ser Val Pro Pro Ser Pro Val Glu Cys Arg Asn
 625 630 635 640
 Pro Phe Ala Phe Thr Pro Ile Ser Ser Ser Met Ala Tyr His Asp Ala
 645 650 655
 Ser Ile Val Ser Ser Ser Pro Val Lys Pro Met Gln Arg Pro Met Ala
 660 665 670
 Thr His Pro Asp Lys Thr Lys Leu Glu Trp Met Asn Asn Gly Tyr Ser
 675 680 685
 Gly Val Gly Asn Ser Ser Val Ser Gly His Gly Ile Leu Pro Ser Tyr
 690 695 700
 Gln Glu Leu Val Glu Asp Arg Phe Arg Lys Pro His Ala Phe Ala Val
 705 710 715 720
 Pro Gly Gln Ser Tyr Gln Ser Gln Ser Arg His His Asp Thr His Phe
 725 730 735
 Gly Arg Leu Thr Pro Val Ser Pro Val Gln His Gln Gly Ala Thr Val
 740 745 750
 Asn Asn Thr Asn Lys Gln Glu Gly Phe Ala Val Pro Ala Pro Leu Asp
 755 760 765
 Asn Lys Gly Thr Asn Ser Ser Ala Ser Ser Asn Phe Arg Cys Arg Ser
 770 775 780
 Val Ser Pro Ala Val His Arg Gln Arg Asn Leu Ser Gly Ser Thr Leu
 785 790 795 800
 Tyr Pro Val Ser Asn Ile Pro Arg Ser Asn Val Thr Pro Phe Gly Ser
 805 810 815
 Pro Val Thr Pro Glu Val His Val Phe Thr Asn Val His Thr Asp Ala
 820 825 830

Cys Ala Asn Asn Ile Ala Gln Arg Ser Gln Ser Val Pro Leu Thr Val
 835 840 845
 Met Met Gln Thr Ala Phe Pro Asn Ala Leu Gln Lys Gln Ala Asn Ser
 850 855 860
 Lys Lys Ile Thr Asn Val Leu Leu Ser Lys Leu Asp Ser Asp Asn Asp
 865 870 875 880
 Asp Ala Val Arg Gly Leu Gly Met Asn Asn Leu Pro Ser Asn Tyr Thr
 885 890 895
 Ala Arg Met Asn Leu Thr Gln Ile Leu Glu Pro Ser Thr Val Phe Pro
 900 905 910
 Ser Ala Asn Pro Gln Asn Met Ile Asp Ser Ser Thr Ser Val Tyr Glu
 915 920 925
 Phe Gln Thr Pro Ser Tyr Leu Thr Lys Ser Asn Ser Thr Gly Gln Ile
 930 935 940
 Asn Phe Ser Pro Gly Asp Asn Gln Ala Gln Ser Glu Ile Gly Glu Gln
 945 950 955 960
 Gln Leu Asp Phe Asn Ser Thr Val Lys Asp Leu Leu Ser Gly Asp Ser
 965 970 975
 Leu Gln Thr Asn Gln Gln Leu Val Gly Gln Gly Ala Ser Asp Leu Thr
 980 985 990
 Asn Thr Ala Ser Asp Phe Ser Ser Asp Ile Arg Leu Ser Ser Glu Leu
 995 1000 1005
 Ser Gly Ser Ile Asn Asp Leu Asn Thr Leu Asp Pro Asn Leu Leu Phe
 1010 1015 1020
 Asp Pro Gly Arg Gln Gln Gly Gln Asp Asp Glu Ala Thr Leu Glu Glu
 1025 1030 1035 1040
 Leu Lys Asn Asp Pro Leu Phe Gln Gln Ile Cys Ser Glu Ser Met Asn
 1045 1050 1055
 Ser Met Thr Ser Ser Gly Phe Glu Trp Ile Glu Ser Lys Asp His Pro
 1060 1065 1070
 Thr Val Glu Met Leu Gly
 1075

<210> 3969

<211> 988

<212> PRT

<213> Homo sapiens

<400> 3969

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Met Ser Ala Gly Asp Ala Lys Asn Leu Leu Asp Thr Lys Leu Pro Thr
  1             5             10             15
Ser Glu Leu Lys Ile Tyr Ala Lys Asp Ile Ile Ile Asn Ile Leu Glu
      20             25             30
Thr Ile Val Lys Glu Phe Gly Lys Val Lys Gln Thr Lys Ala Leu Pro
      35             40             45
Ser Asp Gln Ile Ile Ala Ala Gly Lys Ile Val Asn Thr Val Leu Gln
      50             55             60
Glu Leu Tyr Val Thr Asn Asn Cys Asn Leu Ala Tyr Pro Met Lys Ser
      65             70             75             80
Ser His Leu Arg Leu Ser Gln Gly Asn Ile Gly Thr Gly Ser Leu Pro
      85             90             95
Lys Gln Gln Ala Cys Phe Tyr Leu Glu Asn Val Ser Ser Gln Leu Glu
      100            105            110
His Ile Phe Pro Arg Glu Gly Ile Phe Lys Lys Leu Phe Asp Lys Trp
      115            120            125
Gln Thr Glu Ser Asn Asp Lys Glu Asn Glu Lys Cys Lys Leu Leu Met
      130            135            140
Ile Ala Glu Asn Val Leu Thr Glu Ile Ser Ile Lys Ala Lys Glu Leu
      145            150            155            160
Glu Tyr Ser Leu Ser Leu Leu Asn Leu Pro Pro Leu Glu Asn Cys Glu
      165            170            175
Ser Arg Phe Tyr Asn His Phe Lys Gly Ala Ser Thr Arg Ala Glu Asp
      180            185            190
Thr Lys Ala Gln Ile Asn Met Phe Gly Arg Glu Ile Val Glu Met Leu
      195            200            205
Leu Glu Lys Leu Gln Leu Cys Phe Leu Ser Gln Ile Pro Thr Pro Asp
      210            215            220
Ser Glu Glu Thr Leu Ser Asn Ser Lys Glu His Ile Thr Ala Lys Ser
      225            230            235            240
Lys Tyr Gly Phe Pro Asn Lys His Ser Leu Ser Ser Leu Pro Ile Tyr
      245            250            255

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Asn Thr Lys Thr Lys Asp Gln Ile Ser Val Gly Ser Ser Asn Gln Ile			
260	265	270	
Val Gln Glu Ile Val Glu Thr Val Leu Asn Met Leu Glu Ser Phe Val			
275	280	285	
Asp Leu Gln Phe Lys His Ile Ser Lys Tyr Glu Phe Ser Glu Ile Val			
290	295	300	
Lys Met Pro Ile Glu Asn Leu Ser Ser Ile Gln Gln Lys Leu Leu Asn			
305	310	315	320
Lys Lys Arg Leu Pro Lys Leu Gln Pro Leu Lys Met Phe Ser Asp Lys			
325	330	335	
Ser Glu Ser Asn Thr Ile Asn Phe Lys Glu Asn Ile Gln Asn Ile Leu			
340	345	350	
Leu Arg Val His Ser Phe His Ser Gln Leu Leu Thr Tyr Ala Val Asn			
355	360	365	
Ile Ile Ser Asp Met Leu Ala Val Ile Lys Asn Lys Leu Asp Asn Glu			
370	375	380	
Ile Ser Gln Met Glu Pro Ser Ser Ile Ser Ile Leu Lys Glu Asn Ile			
385	390	395	400
Val Ala Ser Glu Ile Ile Gly Thr Leu Met Asp Gln Cys Thr Tyr Phe			
405	410	415	
Asn Glu Ser Leu Ile Gln Asn Leu Ser Arg Glu Ser Leu Phe Gln Gly			
420	425	430	
Ala Glu Asn Ala Tyr Thr Val Asn Gln Val Glu Leu Ala Thr Asn Met			
435	440	445	
Lys Met Phe Thr Ser Lys Leu Lys Glu Gly Ser Leu Gly Ile Asn Pro			
450	455	460	
Ser Gln Val Ser Lys Thr Gly Phe Val Phe Cys Ser Asp Glu Asp Met			
465	470	475	480
Lys Glu Lys Tyr Arg Val Ser Ser Asp Leu Pro Thr Ser Val Arg Ser			
485	490	495	
Ser Val Glu Asp Thr Val Lys Asn Ser Glu Pro Thr Lys Arg Pro Asp			
500	505	510	
Ser Glu Thr Met Pro Ser Cys Ser Thr Arg Asn Lys Val Gln Asp His			
515	520	525	
Arg Pro Arg Glu Ser Asn Phe Gly Ser Phe Asp Gln Thr Met Lys Gly			
530	535	540	

Asn Ser Tyr Leu Pro Glu Gly Ser Phe Leu Gln Lys Leu Leu Arg Lys
 545 550 555 560
 Ala Ser Asp Ser Thr Glu Ala Ala Leu Lys Gln Val Leu Ser Phe Ile
 565 570 575
 Glu Met Gly Lys Gly Glu Asn Leu Arg Val Phe His Tyr Glu Asn Leu
 580 585 590
 Lys Pro Val Val Glu Pro Asn Gln Ile Gln Thr Thr Ile Ser Pro Leu
 595 600 605
 Lys Ile Cys Leu Ala Ala Glu Asn Ile Val Asn Thr Val Leu Ser Ser
 610 615 620
 Cys Gly Phe Pro Ser Gln Pro His Thr Asn Glu Asn Arg Glu Ile Met
 625 630 635 640
 Lys Pro Phe Phe Ile Ser Lys Gln Ser Ser Leu Ser Glu Val Ser Gly
 645 650 655
 Gly Gln Lys Asp Asn Glu Lys Ser Leu Leu Arg Met Gln Asp Lys Lys
 660 665 670
 Ile Asn Tyr Ile Pro Glu Glu Glu Asn Glu Asn Leu Glu Ala Ser Arg
 675 680 685
 Glu Asp Ser Ser Phe Leu Gln Lys Leu Lys Lys Lys Glu Tyr Pro Lys
 690 695 700
 Ile Glu Thr Val Lys Glu Val Glu Ala Phe Thr Phe Ala Asp His Glu
 705 710 715 720
 Met Gly Ser Asn Glu Val His Leu Ile Ala Arg His Val Thr Thr Ser
 725 730 735
 Val Val Thr Tyr Leu Lys Asn Phe Glu Thr Thr Val Phe Ser Glu Glu
 740 745 750
 Lys Met Ser Val Ser Thr Trp Ser Arg Lys Lys Tyr Glu Ser Lys Gln
 755 760 765

 Phe Leu Arg Asn Ile Tyr Asp Asp Ser Ser Ile Tyr Gln Cys Cys Glu
 770 775 780
 His Leu Thr Glu Ser Val Leu Tyr His Leu Thr Ser Ser Ile Ser Asp
 785 790 795 800
 Gly Thr Lys Lys Gly Arg Glu Lys Glu Lys Ala Trp Glu Ile Gln Glu
 805 810 815
 Ala Thr Phe Ser Lys Ile Ile Ser Ile His Ser Gln Val Phe Glu Ser

820	825	830	
Arg Ser Ile Ser Ile Gly Glu Leu Ala Leu Cys Ile Ser Glu Ile Ile			
835	840	845	
Ile Lys Ile Leu Phe Asn Asn Lys Ile Ile Gln Ala Asp Ile Ala Gln			
850	855	860	
Lys Met Val Ala Ile Pro Thr Lys Tyr Thr Tyr Cys Pro Gly Ile Val			
865	870	875	880
Ser Gly Gly Phe Asp Asp Leu Phe Gln Asp Leu Leu Val Gly Val Ile			
885	890	895	
His Val Leu Ser Lys Glu Ile Glu Val Asp Tyr His Phe Glu Ser Asn			
900	905	910	
Val Arg Asp Lys Ser Phe Ser Met His Arg Asn Asn Ser Val Pro Ile			
915	920	925	
Cys Asn Lys Ile Asn Arg Gln Ala Ser Pro Arg Asp Trp Gln Phe Ser			
930	935	940	
Thr Gln Gln Ile Gly Gln Leu Phe Gln Lys Asn Lys Leu Ser Tyr Leu			
945	950	955	960
Ala Cys Lys Leu Asn Ser Leu Val Gly Asn Leu Lys Thr Ser Glu Ser			
965	970	975	
Lys Glu Val Val Asn Lys Val Phe Asn Ile Val Ser			
980	985		

<210> 3970

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3970

Met Gln Ser Trp Gly Pro Pro Ala Pro Pro Ala Ser Ser Ser Leu Arg
1 5 10 15
Ala Pro His Gln Lys Val Leu Thr Arg Lys Ser Ile Pro Phe Leu Gln
20 25 30
His Arg Pro Leu Gly Pro Cys Ser Leu His Leu His Pro Leu Ser His
35 40 45

His Ser Pro His Pro His Ser Ser His Arg Ser Arg Ser Ser Ser Trp
 50 55 60
 Ala Ile Pro Thr Thr Pro Pro Arg Val Ser Pro Ala Pro Pro Cys Ala
 65 70 75 80
 Gly Gln Cys Pro Pro Pro Gly Pro Asp Leu Pro Pro Ser Trp Pro Leu
 85 90 95
 Pro Arg Pro Glu Pro Ser Val His Ala Ala Val Thr Thr Val Arg Leu
 100 105 110
 Ala

<210> 3971

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3971

Met Glu Val Leu Ser Gly Val Ala Lys Gly Tyr Asn Ile Cys Leu Phe
 1 5 10 15
 Ala Tyr Gly Gln Thr Gly Ser Gly Lys Thr Tyr Thr Met Leu Gly Thr
 20 25 30
 Pro Ala Ser Val Gly Leu Thr Pro Arg Ile Cys Glu Gly Leu Phe Val
 35 40 45
 Arg Glu Lys Asp Cys Ala Ser Leu Pro Ser Ser Cys Arg Ile Lys Val
 50 55 60
 Ser Phe Leu Glu Ile Tyr Asn Glu Arg Val Arg Asp Leu Leu Lys Gln
 65 70 75 80
 Ser Gly Gln Lys Lys Ser Tyr Thr Leu Arg Val Arg Glu His Pro Glu
 85 90 95
 Met Gly Pro Tyr Val Gln Gly Leu Ser Gln His Val Val Thr Asn Tyr
 100 105 110
 Lys Gln Val Ile Gln Leu Leu Glu Glu Gly Ile Ala Asn Arg Ile Thr
 115 120 125
 Ala Ala Thr His Val His Glu Ala Ser Ser Arg Ser His Ala Ile Phe
 130 135 140

Thr Ile His Tyr Thr Gln Ala Ile Leu Glu Asn Asn Leu Pro Ser Glu
 145 150 155 160
 Met Ala Ser Lys Ile Asn Leu Val Asp Leu Ala Gly Ser Glu Arg Ala
 165 170 175
 Asp Pro Ser Tyr Cys Lys Asp Arg Ile Ala Glu Gly Ala Asn Ile Asn
 180 185 190
 Lys Ser Leu Val Thr Leu Gly Ile Val Ile Ser Thr Leu Ala Gln Asn
 195 200 205
 Ser Gln Val Phe Ser Ser Cys Gln Ser Leu Asn Ser Ser Val Ser Asn
 210 215 220
 Gly Gly Asp Ser Gly Ile Leu Ser Ser Pro Ser Gly Thr Ser Ser Gly
 225 230 235 240
 Gly Ala Pro Ser Arg Arg Gln Ser Tyr Ile Pro Tyr Arg Asp Ser Val
 245 250 255
 Leu Thr Trp Leu Leu Lys Asp Ser Leu Gly Gly Asn Ser Lys Thr Ile
 260 265 270
 Met Val Ala Ser Glu Trp Asp Ala Arg Ala Gly Pro Val Leu Gly Leu
 275 280 285
 Val Leu Tyr Leu Arg Glu Arg Ala Met Ala Pro Val Ser Gly Met Pro
 290 295 300
 Glu Leu Asp Leu Cys Trp Asp Trp Tyr Ser Ile Ser Glu Lys Gly Pro
 305 310 315 320
 Trp Pro Gln

<210> 3972

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3972

Met Arg Val Thr Leu Gly Leu Glu Gln Arg Asp Thr Ala Glu Trp Pro
 1 5 10 15
 Leu Val Pro Arg Thr Arg Gln Ser Ser Arg Thr Gly Cys Lys Pro Ala
 20 25 30

Ile	Val	Ala	Met	Pro	Val	Trp	Glu	Thr	Gln	Leu	Ala	Leu	Asp	Phe	Ser
35				40				45							
Gly	Asn	His	His	Val	Arg	His	Ser	His	Phe	His	Pro	Ser	Gln	Gly	Phe
50				55				60							
Leu	Arg	Asp	Pro	Gly	Ser	Leu	Ser	Gln	Thr	Ser	Lys	Leu	Ser	Arg	Glu
65				70				75				80			
Cys	Val	Cys	Leu	Ser	Ser	Asn	Leu	Asn	Thr	Leu	Gly	Cys	Ser	Val	Arg
85				90				95							
Cys	Arg	Ser	Glu	Thr	Ala	Val	Glu	Thr	Arg	Phe	Pro	Ala	Leu	Gly	Trp
100				105				110							
Gly	Pro	His	Lys	Ala	Ser	Ser	Ile	Ser	Pro	Trp	Pro	Ser	Phe	Leu	Ile
115				120				125							
Cys	Arg	Thr	Gly	Ser	Leu	Glu	Asn	Leu	Gly	Gly					
130				135											

<210> 3973

<211> 241

<212> PRT

<213> Homo sapiens

<400> 3973

Met	Tyr	Ile	Tyr	Leu	Leu	Pro	Val	Arg	Phe	Glu	Arg	Ile	Phe	Phe	Phe
1				5					10					15	
Phe	Phe	Phe	Leu	Arg	Arg	Thr	Leu	Thr	Leu	Ser	Pro	Arg	Leu	Glu	Cys
			20					25					30		
Ser	Gly	Thr	Ile	Ser	Asp	His	Cys	Asn	Leu	Cys	Leu	Pro	Gly	Ser	Ser
		35				40						45			
Asp	Ser	Pro	Thr	Ser	Ala	Ser	His	Val	Ala	Gly	Ile	Thr	Gly	Ile	Arg
	50					55					60				
His	His	Ala	Arg	Leu	Lys	Phe	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Gly	Ala
65				70					75					80	
Leu	Pro	Val	Gly	Gln	Ala	Gly	Leu	Glu	Leu	Leu	Thr	Ser	Gly	Asp	Leu
			85						90					95	
Pro	Ala	Leu	Ala	Ser	Gln	Ser	Ala	Val	Ile	Arg	Gly	Met	Ser	His	Arg
		100						105					110		

Thr Leu Pro Lys Gly Tyr Ile Arg Pro Tyr Lys Tyr Phe Asp Ser Leu
 115 120 125
 Phe Phe Phe Phe Phe Phe Leu Glu Thr Glu Phe Cys Ser Cys Cys Pro
 130 135 140
 Gly Trp Ser Ala Val Gly Gln Ser Gln Leu Thr Ala Thr Ser Ala Ser
 145 150 155 160
 Trp Val Gln Ala Val Leu Leu Pro Gln Ser Pro Glu Trp Leu Gly Leu
 165 170 175
 Gln Ala His Ala Arg Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe
 180 185 190
 His Arg Val Gly Gln Ala Asp Leu Lys Leu Leu Thr Ser Ala His Leu
 195 200 205
 Ser Leu Pro Lys Cys Trp Asp Tyr Arg Arg Glu Pro Pro Arg Pro Ala
 210 215 220
 Lys Tyr Phe Tyr Tyr Thr Met His Ile Val Glu Tyr Met Leu Leu Val
 225 230 235 240
 Leu

<210> 3974

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3974

Met Ser Leu Ser Trp Gly Gly Ile Gln Thr Ala Phe Phe Gly Tyr Gly
 1 5 10 15
 Glu Gly Gly Glu Val Cys Val Cys Thr Cys Val Cys Val Leu Ser Phe
 20 25 30
 Leu Met Pro Leu Asn Phe Phe Ser Phe Leu Phe Phe Phe Leu Arg Gln
 35 40 45
 Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Asn Leu Ala
 50 55 60
 His Arg Lys Leu His Leu Pro Gly Ser His His Ser Pro Ala Ser Ala
 65 70 75 80

Ser Arg Val Pro Gly Thr Met Gly Thr Cys Gln His Ala Gln Leu Ile
 85 90 95
 Phe Cys Ile Phe Ser Gly Asp Gly Val Ser Pro Cys Trp Pro Gly Trp
 100 105 110
 Ser Gly Ser Pro Asp Leu Met Ile His Pro Pro Arg Pro Ser Lys Val
 115 120 125
 Leu Gly Leu Gln Ala
 130

<210> 3975

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3975

Met Trp Ala Ser Pro Ala Pro Thr Leu Ile Asp Ser Gly Asp Ser Val
 1 5 10 15
 Val Ala Lys Tyr Ile Asn Arg Phe Arg Gln Ala Gln Pro Thr Ser Arg
 20 25 30
 Glu Glu Arg Gln Pro Ala Gly Pro Thr Pro Ala Asp Phe Trp Trp Leu
 35 40 45
 Gln Ser Asp Ser Pro Gly Pro Ser Ser Gln Ser Ala Ala Ala Gly Ala
 50 55 60
 Asn Lys Pro Glu Gly Arg Pro His Thr Ala Val Pro Thr Ala Val Asn
 65 70 75 80
 Val Thr Ser Ala Ser His Ala Val Ala Pro Leu Gln Glu Ile Lys Gln
 85 90 95
 Val Thr Ser Pro Phe Thr Pro Ser Leu Gly Cys Leu Asn
 100 105

<210> 3976

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3976

Met Gln Ser Pro Cys Pro Val Ser Pro Glu Thr Gly Gly Pro Cys Phe
 1 5 10 15
 Pro Val Glu Leu Thr Ala Asp Gly Arg Ala Thr Val Val Trp Val Trp
 20 25 30
 Pro Gly Val Ile Gln Glu Gly His Leu Gly Ala Ser His Gly Gln Met
 35 40 45
 Phe Ser Gly Pro Pro Gly Gly Val Thr Leu Ala Ser Pro Trp Ser Arg
 50 55 60
 Gln Leu Thr Ala Pro Ala Pro Pro Ser Pro Pro Pro Cys Leu Pro Cys
 65 70 75 80
 His Pro Trp Gly Gln Val Ser Ser Met Thr Phe Pro Ala Pro Ser Leu
 85 90 95
 Tyr Leu Val Thr Val Asn Pro Arg Arg Lys Arg Arg Tyr His Leu Leu
 100 105 110
 Gln Lys Ala Lys Asn Gln Val Arg Phe Gln Val Val Gly His Leu Gly
 115 120 125
 Gly Ser Pro Arg Pro Thr Leu Ala Gly Phe Leu Arg Gly Phe Gln Ser
 130 135 140
 Thr Trp Arg
 145

<210> 3977

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3977

Met Ala Trp Gly Ser Val Gly Val Gly Pro Leu Val Val Trp Val Cys
 1 5 10 15
 Ala Gly Val Gly Trp Cys Gly Cys Arg Arg Leu Gly Gly Cys Val Arg
 20 25 30
 Val Leu Gly Ile His Val Val Trp Gly Cys Val Asp Val Tyr Thr Gly
 35 40 45

Val Ser Ala Gly Val Asp Gly Val Cys Ala Gly Val Ala Cys Leu Val
 50 55 60
 Trp Val Val Gly Val Arg Ala Gly Met Cys Val Val Cys Arg Arg Val
 65 70 75 80
 Gly Ser Cys Gly Gly Val Gln Val Cys Val Leu Gly Ile Asp Val Ala
 85 90 95
 Trp Val Ala Gly Cys Val Gln Val Leu Gly Val Cys Arg
 100 105

<210> 3978

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3978

Met Ser Ser Phe Leu Gly Gly Gly Glu Asp Arg Val Leu Leu Cys Arg
 1 5 10 15
 Ala Gly Trp Ser Ala Val Val Arg Ser Arg Leu Thr Ala Leu Ser Ala
 20 25 30
 Ser Trp Val Arg Glu Ile Leu Leu Pro Gln Pro Pro Glu Trp Leu Gly
 35 40 45
 Leu Gln Val Arg Ala Thr Thr Leu Ser Ser Phe Phe Leu Cys Ala Phe
 50 55 60
 Cys Val Val Ala Gly Phe Ser Gln Cys Cys Pro Gly Trp Cys His Thr
 65 70 75 80
 Pro Gly Leu Lys Gln Ser Ser Arg Leu Gly Leu Pro Lys Cys Trp Asp
 85 90 95
 Tyr Arg Arg Glu Pro Arg
 100

<210> 3979

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3979

Met Arg Val Leu His Val Gly Ala Phe Asn Trp Glu Glu Phe Leu Leu
 1 5 10 15
 Ala Cys Asp Gly Phe Ser Asn Gly Ala Glu Ile Pro Lys Tyr Lys Pro
 20 25 30
 Ala Asn Arg Ala Leu Lys Phe His Gly Val Ser Phe Pro Ala Ala Cys
 35 40 45
 Ser Gly Pro Val Arg Cys Cys Gly Met Phe Thr Ile Glu Pro Gly Ser
 50 55 60
 Val Pro Leu Gly Arg Ala Ala Ala Leu Val Glu Arg Val Arg Ser Gly
 65 70 75 80
 Pro Pro Pro Arg Gly Gln Pro Gly Leu Ser Gly Gly Gln Lys Pro Leu
 85 90 95
 Met Glu Asp Phe Ser Ser Leu Val Ser Gln Ala Gly Cys Ile Phe Val
 100 105 110
 Arg Leu Ser
 115

<210> 3980

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3980

Met Met Cys Phe Ile Ser Val Phe Asp Val Phe Ser Phe Phe Ser Pro
 1 5 10 15
 Gly Phe Thr Ser Phe Ala Ile Ser Leu Cys Phe Gly Phe Ala Ala Asn
 20 25 30
 Leu Ile Gly Leu Gly Leu Ala Ala Lys Ala Leu Asp Ser Gly Ala Phe
 35 40 45
 Phe Ser Phe Val Val Leu Ser Pro Ser Phe Pro Leu Pro Ser Cys Pro
 50 55 60
 His His Phe Thr Leu Leu Lys Val Ile Met Asn Thr Arg Ser Glu Ile
 65 70 75 80

Pro Phe Leu Ala Pro Ser Thr Leu Gly Phe Phe Glu Met Glu Ser His
 85 90 95
 Cys Val Thr Gln Ala Val Ala Arg Leu Cys Ala Leu Gln Pro Pro Ser
 100 105 110
 Pro Trp Leu Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp
 115 120 125
 Tyr Arg Cys Lys Pro Arg His Leu Ala Asn Phe Ser Val Phe Ser Arg
 130 135 140
 Asp Gly Val Ser Pro Cys
 145 150

<210> 3981

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3981

Met Arg Asn Met Ile Pro Gln Asp Asn Glu Asn Pro Pro Gln Gln Gly
 1 5 10 15
 Glu Ala Asn Gln Asn Asp Phe Ala Leu Val Ala Gln Ala Gly Val Gln
 20 25 30
 Trp Leu Asp Leu Gly Pro Gln Leu Pro Leu Leu Pro Gly Phe Lys Arg
 35 40 45
 Phe Phe Cys Leu Ser Leu Leu Ser Ser Cys Gly Tyr Ser Trp Ser Leu
 50 55 60
 Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala Tyr Gly
 65 70 75 80
 Lys Leu Arg Leu Pro Gly Ser Cys His Ser Pro Ala Ser Ala Ser Arg
 85 90 95
 Val Ala Arg Thr Thr Gly Ala Arg His His Thr Arg Leu Ile Phe Val
 100 105 110
 Phe Leu Val Glu Thr Arg Phe His Arg Val Ser Gln Asp Gly Leu Asp
 115 120 125
 Leu Leu Thr Ser
 130

<210> 3982

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3982

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Met Arg Asn Gln Ala Pro Gly Arg Pro Lys Gly Ala Thr Phe Pro Pro
 1             5             10             15
Arg Arg Pro Thr Gly Ser Arg Ala Pro Pro Leu Ala Pro Glu Leu Arg
      20             25             30
Ala Lys Gln Arg Pro Gly Glu Arg Val Met Ala Leu Pro Val Thr Ala
      35             40             45
Leu Leu Leu Pro Leu Ala Leu Leu Leu His Ala Ala Arg Pro Ser Gln
      50             55             60
Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly Glu Thr Val
      65             70             75             80
Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser Gly Cys Ser
      85             90             95
Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr Phe Leu Leu
      100            105            110
Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu Asp Thr Gln
      115            120            125
Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu Thr Leu Ser
      130            135            140
Asp Phe Arg Arg Glu Asn Glu Gly
145            150

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<210> 3983

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3983

Met Gly Phe Pro Gln Arg Arg Leu Gly Lys Ser Val Gly Val Thr Ala
 1 5 10 15
 Gly Gly Leu Leu Leu Gly Leu Gln Glu Arg Gln Asn His Arg Pro Leu
 20 25 30
 Cys Gly Phe Gln Ala Gly Leu Gly Phe Pro Gly Gly Leu Gly Phe Cys
 35 40 45
 Ala Leu His Asp Cys Leu Ala Gln Asp Leu Ser His Leu Gln Gln Glu
 50 55 60
 Glu Ala Gly Thr Leu Gly Arg Ala Gly Cys Cys Leu Val Leu Lys Pro
 65 70 75 80
 Leu Ala Ala Cys Pro Ser Ser Ser Arg Ser Ala Val Pro Gly Gly Ala
 85 90 95
 Gly Ser Leu Arg Arg Ala Gly Pro Gly Leu Ser Tyr Pro Leu Arg Ala
 100 105 110
 Trp His Cys Pro Gly Arg Gly Ala Phe Val Gln Tyr Tyr Ser Asn Asp
 115 120 125
 Arg Thr
 130

<210> 3984

<211> 270

<212> PRT

<213> Homo sapiens

<400> 3984

Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala
 1 5 10 15
 Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Lys Asn
 20 25 30
 Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala Glu Asn
 35 40 45
 Pro Pro Ser Gly Ser Val Arg Lys Thr Arg Lys Asn Lys Gln Lys Thr
 50 55 60
 Pro Gly Asn Gly Asp Gly Gly Ser Thr Ser Glu Ala Pro Gln Pro Pro
 65 70 75 80

Arg Lys Lys Arg Ala Arg Ala Asp Pro Thr Val Glu Ser Glu Glu Ala
 85 90 95
 Phe Lys Asn Arg Met Glu Val Lys Val Lys Ile Pro Glu Glu Leu Lys
 100 105 110
 Pro Trp Leu Val Glu Asp Trp Asp Leu Val Thr Arg Gln Lys Gln Leu
 115 120 125
 Phe Gln Leu Pro Ala Lys Lys Asn Val Asp Ala Ile Leu Glu Glu Tyr
 130 135 140
 Ala Asn Cys Lys Lys Ser Gln Gly Asn Val Asp Asn Lys Glu Tyr Ala
 145 150 155 160
 Val Asn Glu Val Val Ala Gly Ile Lys Glu Tyr Phe Asn Val Met Leu
 165 170 175
 Gly Thr Gln Leu Leu Tyr Lys Phe Glu Arg Pro Gln Tyr Ala Glu Ile
 180 185 190
 Leu Leu Ala His Pro Asp Ala Pro Met Ser Gln Val Tyr Gly Ala Pro
 195 200 205
 His Leu Leu Arg Leu Phe Val Arg Ile Gly Ala Met Leu Ala Tyr Thr
 210 215 220
 Pro Leu Asp Glu Lys Ser Leu Ala Leu Leu Leu Gly Tyr Leu His Asp
 225 230 235 240
 Phe Leu Lys Tyr Leu Ala Lys Asn Ser Ala Ser Leu Phe Thr Ala Ser
 245 250 255
 Asp Tyr Lys Val Ala Ser Ala Glu Tyr His Arg Lys Ala Leu
 260 265 270

<210> 3985

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3985

Met Arg His Leu Val His Met Ala Ser Phe Ser Ala Gln Thr Asn Met
 1 5 10 15
 His Ala Arg Asn Leu Ala Ile Val Trp Ala Pro Asn Leu Leu Arg Ser
 20 25 30

Lys Asp Ile Glu Ala Ser Gly Phe Asn Gly Thr Ala Ala Phe Met Glu
 35 40 45
 Val Arg Val Gln Ser Ile Val Val Glu Phe Ile Leu Thr His Val Asp
 50 55 60
 Gln Leu Phe Gly Gly Ala Ala Leu Ser Gly Gly Glu Val Glu Ser Gly
 65 70 75 80
 Trp Arg Ser Leu Pro Gly Thr Arg Ala Ser Gly Ser Pro Glu Asp Leu
 85 90 95
 Met Pro Arg Pro Leu Pro Tyr His Leu Pro Ser Ile Leu Gln Ala Gly
 100 105 110
 Asp Gly Pro Pro Gln Met Arg Pro Tyr His Thr Ile Ile Glu Ile Ala
 115 120 125
 Glu His Lys Arg Lys Gly Ser Leu Lys Val Arg Lys Trp Arg Ser Ile
 130 135 140
 Phe Asn Leu Gly Arg Ser Gly His Glu Thr Lys Arg Lys Leu Pro Arg
 145 150 155 160
 Gly Ala Glu Asp Arg Glu Asp Lys Ser Asn Lys Gly Thr Leu Arg Pro
 165 170 175
 Ala Lys Ser Met Gly Ser Leu Ser Ala Ala Ala Gly Ala Ser Asp Glu
 180 185 190
 Pro Glu Gly Leu Val Gly Pro Ser Ser Pro Arg Pro Ser Pro Leu Leu
 195 200 205
 Pro Glu Ser Leu Glu Asn Asp Ser Ile Glu Ala Ala Glu Gly Glu Gln
 210 215 220
 Glu Pro Glu Ala Glu Ala Leu Gly Gly Thr Asn Ser Glu Pro Gly Thr
 225 230 235 240
 Pro Arg Ala Gly Arg Ser Ala Ile Arg Ala Gly Gly Ser Ser Arg Ala
 245 250 255
 Glu Arg Cys Ala Gly Val His Ile Ser Asp Pro Tyr Asn Val Asn Leu
 260 265 270
 Pro Leu His Ile Thr Ser Ile Leu Ser Val Pro Pro Asn Ile Ile Ser
 275 280 285
 Asn Val Ser Leu Ala Arg Leu Thr Arg Gly Leu Glu Cys Pro Ala Leu
 290 295 300
 Gln His Arg Pro Ser Pro Ala Ser Gly Pro Gly Pro Gly Pro Gly Leu
 305 310 315 320

Gly	Pro	Gly	Pro	Pro	Asp	Glu	Lys	Leu	Glu	Ala	Ser	Pro	Ala	Ser	Ser			
						325							330					335
Pro	Leu	Ala	Asp	Ser	Gly	Pro	Asp	Asp	Leu	Ala	Pro	Ala	Leu	Glu	Asp			
						340							345					350
Ser	Leu	Ser	Gln	Glu	Val	Gln	Asp	Ser	Phe	Ser	Phe	Leu	Glu	Asp	Ser			
						355							360					365
Ser	Ser	Ser	Glu	Pro	Glu	Trp	Val	Gly	Ala	Glu	Asp	Gly	Glu	Val	Ala			
						370							375					380
Gln	Ala	Glu	Ala	Ala	Gly	Ala	Ala	Phe	Ser	Pro	Gly	Glu	Asp	Asp	Pro			
						385							390					400
Gly	Met	Gly	Tyr	Leu	Glu	Glu	Leu	Leu	Gly	Val	Gly	Pro	Gln	Val	Glu			
						405							410					415
Glu	Phe	Ser	Val	Glu	Pro	Pro	Leu	Asp	Asp	Leu	Ser	Leu	Asp	Glu	Ala			
						420							425					430
Gln	Phe	Val	Leu	Ala	Pro	Ser	Cys	Cys	Ser	Val	Asp	Ser	Ala	Gly	Pro			
						435							440					445
Arg	Pro	Glu	Val	Glu	Glu	Glu	Asn	Gly	Glu	Glu	Val	Phe	Leu	Ser	Ala			
						450							455					460
Tyr	Asp	Asp	Leu	Ser	Pro	Leu	Leu	Gly	Leu	Leu	Leu	Gln	Pro	Gly	Trp			
						465							470					475
Gly	His	Arg	Ser	His	Ser	Ser	Glu	Gly	Gln	Cys	Leu	Arg	Ile	Lys	Ala			
						485							490					495
Val	Phe	Leu																

<210> 3986

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3986

Met Lys Met Glu Glu Met Ser Leu Ser Gly Leu Asp Asn Ser Lys Leu
1 5 10 15
Glu Ala Ile Ala Gln Glu Ile Tyr Ala Asp Leu Val Glu Asp Ser Cys
20 25 30

Leu Gly Phe Cys Phe Glu Val His Arg Ala Val Lys Cys Gly Tyr Phe
 35 40 45
 Phe Leu Asp Asp Thr Asp Pro Asp Ser Met Lys Asp Phe Glu Ile Val
 50 55 60
 Asp Gln Pro Gly Leu Asp Ile Phe Gly Gln Ile Phe Asn Gln Trp Lys
 65 70 75 80
 Ser Lys Glu Cys Val Cys Pro Asn Cys Ser Arg Ser Ile Ala Ala Ser
 85 90 95
 Arg Phe Ala Pro His Leu Glu Lys Cys Leu Gly Met Gly Arg Asn Ser
 100 105 110
 Ser Arg Ile Ala Asn Arg Arg Ile Ala Asn Ser Asn Asn Met Asn Lys
 115 120 125
 Ser Glu Ser Asp Gln Glu Asp Asn Asp Asp Ile Asn Asp Asn Asp Trp
 130 135 140
 Ser Tyr Gly Ser Glu Lys Lys Ala Lys Lys Arg Lys Ser Asp Lys Asn
 145 150 155 160
 Pro Asn Ser Pro Arg Arg Ser Lys Ser Leu Lys His Lys Asn Gly Glu
 165 170 175
 Leu Ser Asn Ser Asp Pro Phe Lys Tyr Asn Asn Ser Thr Gly Ile Ser
 180 185 190
 Tyr Glu Thr Leu Gly Pro Glu Glu Leu Arg Ser Leu Leu Thr Thr Gln
 195 200 205
 Cys Gly Val Ile Ser Glu His Thr Lys Lys Met Cys Thr Arg Ser Leu
 210 215 220
 Arg Cys Pro Gln His Thr Asp Gly Gln Arg Arg Thr Val Arg Ile Tyr
 225 230 235 240
 Phe Leu Gly Pro Ser Ala Val Leu Pro Glu Val Glu Ser Ser Leu Asp
 245 250 255
 Asn Asp Ser Phe Asp Met Thr Asp Ser Gln Ala Leu Ile Ser Arg Leu
 260 265 270
 Gln Trp Asp Gly Ser Ser Asp Leu Ser Pro Ser Asp Ser Gly Ser Ser
 275 280 285
 Lys Thr Ser Glu Asn Gln Gly Trp Gly Leu Gly Thr Asn Ser Ser Glu
 290 295 300
 Ser Arg Lys Thr
 305

<210> 3987

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3987

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Met Ala Lys Lys Ile Val Leu Ala Phe Ala Asp Gln Cys Asn Asn Gln
  1             5             10             15
Leu Ala Asn Ala Ala Val Ser Ser Asp Ser Tyr Val Leu Cys Asn Ile
             20             25             30
Leu Arg Thr Gln Phe Phe Phe Phe Leu Phe Val Cys Leu Phe Phe Glu
             35             40             45
Ala Glu Ser Arg Ser Val Thr Gln Val Gly Val Gln Trp Arg His Leu
             50             55             60
Gly Ser Leu Tyr Ala Pro Pro Pro Arg Phe Thr Pro Phe Ser Cys Leu
             65             70             75             80
Ser Leu Pro Ser Ser Trp Asp Cys Arg Cys Leu Pro Pro Cys Pro Ala
             85             90             95
Asp Phe Phe Cys Ile Phe Ser Gly Asp Gly Ile Ser Pro Cys Trp Pro
             100            105            110
Gly Trp Ser Arg Ser Pro Asp Leu Met Ser His His Thr Arg Pro Gly
             115            120            125
Thr Gln Phe Leu Ile Arg Leu Val Leu Phe Leu Ile Phe Ser Gln Val
             130            135            140
Trp Leu Ile Leu Val Leu Phe Phe Phe
145             150

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<210> 3988

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3988

Met Ser His Arg Ala Arg Leu Leu Leu Phe Phe Leu Arg Cys Ser Leu
 1 5 10 15
 Thr Leu Leu Pro Arg Leu Glu Cys Ser Gly Val Ile Ser Ala His Cys
 20 25 30
 Ser Arg Ser Leu Leu Gly Ser Asn Asp Ser Pro Ala Ser Ala Ser Gln
 35 40 45
 Val Ala Gly Ile Thr Gly Ala Cys His His Ala Gln Leu Ile Phe Val
 50 55 60
 Phe Leu Val Glu Met Gly Phe His His Val Gly Gln Ala Gly Leu Glu
 65 70 75 80
 Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly
 85 90 95
 Ile Thr Gly Val Ser Asn Leu Ala Arg Pro Gly Ala Val Thr Phe Lys
 100 105 110
 Ala Arg Arg Pro Glu Arg Arg Leu Val Gln Arg Ser Gln Gly Ser Glu
 115 120 125
 Gly Leu Arg Pro Gly Arg Gln Glu Pro Gly Asp Met Asp Ile Cys Glu
 130 135 140
 Gly Glu
 145

<210> 3989

<211> 609

<212> PRT

<213> Homo sapiens

<400> 3989

Met Glu Ala Glu Phe Tyr Met Val Ile Leu Thr Cys Leu Ile Phe Arg
 1 5 10 15
 Asn Ser Glu Gly Phe Gln Ile Val His Val Gln Lys Gln Gln Cys Leu
 20 25 30
 Phe Lys Asn Glu Lys Val Val Val Gly Ser Cys Asn Arg Thr Ile Gln
 35 40 45
 Asn Gln Gln Trp Met Trp Thr Glu Asp Glu Lys Leu Leu His Val Lys
 50 55 60

Ser Ala Leu Cys Leu Ala Ile Ser Asn Ser Ser Arg Gly Pro Ser Arg
 65 70 75 80
 Ser Ala Ile Leu Asp Arg Cys Ser Gln Ala Pro Arg Trp Thr Cys Tyr
 85 90 95
 Asp Gln Glu Gly Phe Leu Glu Val Glu Asn Ala Ser Leu Phe Leu Gln
 100 105 110
 Lys Gln Gly Ser Arg Val Val Val Lys Lys Ala Arg Lys Tyr Leu His
 115 120 125
 Ser Trp Met Lys Ile Asp Val Asn Lys Glu Gly Lys Leu Val Asn Glu
 130 135 140
 Ser Leu Cys Leu Gln Lys Ala Gly Leu Gly Ala Glu Val Ser Val Arg
 145 150 155 160
 Ser Thr Arg Asn Thr Ala Pro Pro Gln Ile Leu Thr Thr Phe Asn Ala
 165 170 175
 Val Pro Asp Gly Leu Val Phe Leu Ile Arg Asn Thr Thr Glu Ala Phe
 180 185 190
 Ile Arg Asn Ala Ala Glu Asn Tyr Ser Gln Asn Ser Ser Glu Arg Gln
 195 200 205
 His Pro Asn Leu His Met Thr Gly Ile Thr Asp Thr Ser Trp Val Leu
 210 215 220
 Ser Thr Thr Gln Pro Phe Ser Ser Thr Thr Glu Glu Thr Gly Leu Ala
 225 230 235 240
 Glu Pro Glu Arg Cys Asn Phe Thr Leu Ala Glu Ser Lys Ala Ser Ser
 245 250 255
 His Ser Val Ser Ile Gln Trp Arg Ile Leu Gly Ser Pro Cys Asn Phe
 260 265 270
 Ser Leu Ile Tyr Ser Ser Asp Thr Leu Gly Ala Ala Leu Cys Pro Thr
 275 280 285
 Phe Arg Ile Asp Asn Thr Thr Tyr Gly Cys Asn Leu Gln Asp Leu Gln
 290 295 300
 Ala Gly Thr Ile Tyr Asn Phe Arg Ile Ile Ser Leu Asp Glu Glu Arg
 305 310 315 320
 Thr Val Val Leu Gln Thr Asp Pro Leu Pro Pro Ala Arg Phe Gly Val
 325 330 335
 Ser Lys Glu Lys Thr Thr Ser Thr Ser Leu His Val Trp Trp Thr Pro
 340 345 350

Ser Ser Gly Lys Val Thr Ser Tyr Glu Val Gln Leu Phe Asp Glu Asn
 355 360 365
 Asn Gln Lys Ile Gln Gly Val Gln Ile Gln Glu Ser Thr Ser Trp Asn
 370 375 380
 Glu Tyr Thr Phe Phe Asn Leu Thr Ala Gly Ser Lys Tyr Asn Ile Ala
 385 390 395 400
 Ile Thr Ala Val Ser Gly Gly Lys Arg Ser Phe Ser Val Tyr Thr Asn
 405 410 415
 Gly Ser Thr Val Pro Ser Pro Val Lys Asp Ile Gly Ile Ser Thr Lys
 420 425 430
 Ala Asn Ser Leu Leu Ile Ser Trp Ser His Gly Ser Gly Asn Val Glu
 435 440 445
 Arg Tyr Arg Leu Val Leu Met Asp Lys Gly Ile Leu Val His Gly Gly
 450 455 460
 Val Val Asp Lys His Ala Thr Ser Tyr Ala Phe His Gly Leu Thr Pro
 465 470 475 480
 Gly Tyr Leu Tyr Asn Leu Thr Val Met Thr Glu Ala Ala Gly Leu Gln
 485 490 495
 Asn Tyr Arg Trp Lys Leu Val Arg Thr Ala Pro Met Glu Val Ser Asn
 500 505 510
 Leu Lys Val Thr Asn Asp Gly Ser Leu Thr Ser Leu Lys Val Lys Trp
 515 520 525
 Gln Arg Pro Pro Gly Asn Val Asp Ser Tyr Asn Ile Thr Leu Ser His
 530 535 540
 Lys Gly Thr Ile Lys Glu Ser Arg Val Leu Ala Pro Trp Ile Thr Glu
 545 550 555 560
 Thr His Phe Lys Glu Leu Val Pro Gly Arg Leu Tyr Gln Val Thr Val
 565 570 575
 Ser Cys Val Ser Gly Glu Leu Ser Ala Gln Lys Met Ala Val Gly Arg
 580 585 590
 Thr Cys Glu Ser Trp Ala Pro Glu Cys Ser Leu Val Ala Gln Ile Thr
 595 600 605
 Leu

<210> 3990

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3990

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Met Trp Trp His Leu Cys Thr His Ser Ala Val His Pro Pro Thr Pro
 1             5             10             15
Ser Ser Phe Lys Arg His Ser Ser Pro Gln Lys Lys Pro Pro Val Leu
      20             25             30
Ile Lys Gln Leu Pro Leu Leu Gly Ile Pro Gln Ala Pro Leu Leu Gly
      35             40             45
Ser Glu Glu Gly Leu Ala Ser Glu Arg Ser Ser Asp Asn Lys Glu Ser
      50             55             60
Gly Thr His Cys Trp Ser Arg Pro Gly Leu Val Phe His Pro Ala Glu
      65             70             75             80
Val Ala Glu Pro Gly Gly Ser Gly Ser Ala Thr Gly Glu Pro His Ala
              85             90             95
Cys Arg Arg Ser Pro Ala Pro Pro Arg Ala Ser Pro Pro Gly Gly Ser
      100            105            110
Arg Glu Leu Ser Arg Thr Arg Arg Gly Ala Gly Gly Lys Gln Trp Leu
      115            120            125
Arg Ala Ala Asp Lys Pro His Val Asp Pro Arg Pro Leu Ser Leu Trp
      130            135            140
Val Gly Leu Gly Asn Trp Arg Gly Gly Arg Met Ile Gly Asn Met Lys
      145            150            155            160
Thr Ala Arg Pro Gly Trp Ser Ser Gly Lys Arg Arg His Gly His
              165            170            175

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<210> 3991

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3991

Met Tyr Leu Val Ala Leu Thr Gly Pro Ser Leu Tyr Asn Pro Phe Leu
 1 5 10 15
 Thr Ser Ser Lys Pro Pro Ser Ser Leu Pro Leu Lys Phe Leu Phe Phe
 20 25 30
 Phe Asn Pro Leu Gly Leu Leu Ile Tyr His Ile Pro Gln Val Glu Pro
 35 40 45
 Arg Asp Leu Asp Phe Ser Thr Ser His Gly Ala Val Ser Ala Thr Pro
 50 55 60
 Pro Ala Pro Thr Leu Val Ser Gly Asp Pro Trp Tyr Pro Trp Tyr Asn
 65 70 75 80
 Trp Lys Gln Pro Pro Glu Arg Glu Leu Ser Arg Leu Arg Arg Leu Tyr
 85 90 95
 Gln Gly His Leu Gln Glu Glu Ser Gly Pro Pro Pro Glu Ser Met Pro
 100 105 110
 Lys Met Pro Pro Arg Thr Pro Ala Glu Ala Ser Ser Thr Gly Gln Thr
 115 120 125
 Gly Pro Gln Ser Ala Leu
 130

<210> 3992

<211> 173

<212> PRT

<213> Homo sapiens

<400> 3992

Met Leu Ile Asn Leu Phe Ser Val Phe Arg Thr Leu Ser Phe Val Ser
 1 5 10 15
 Cys Ala Thr Gln Met Phe Phe Phe Leu Gly Phe Ala Val Thr Asn Cys
 20 25 30
 Leu Leu Leu Gly Val Met Gly Tyr Asp Arg Tyr Ala Ala Ile Cys Gln
 35 40 45
 Pro Leu Gln Tyr Ala Val Leu Met Ser Trp Arg Val Cys Gly Gln Leu
 50 55 60
 Ile Ala Thr Cys Ile Ile Ser Gly Phe Leu Ile Ser Leu Val Gly Thr
 65 70 75 80

Thr Phe Val Phe Ser Leu Pro Phe Cys Gly Ser Asn Lys Val Asn His
 85 90 95
 Tyr Phe Cys Asp Ile Ser Pro Val Ile Arg Leu Ala Cys Ala Asp Ser
 100 105 110
 Tyr Ile Gly Glu Leu Val Ile Phe Ile Phe Gly Val Leu Val Leu Val
 115 120 125
 Val Pro Leu Ile Phe Ile Cys Ile Ser Tyr Gly Phe Ile Val Arg Thr
 130 135 140
 Ile Leu Lys Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Ser Thr
 145 150 155 160
 Cys Ala Ser His Leu Ile Val Val Ile Val His Tyr Gly
 165 170

<210> 3993

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3993

Met Asn His Met Ser Ala Ser Leu Lys Ile Ser Asn Ser Ser Lys Phe
 1 5 10 15
 Gln Val Ser Glu Phe Ile Leu Leu Gly Phe Pro Gly Ile His Ser Trp
 20 25 30
 Gln His Trp Leu Ser Leu Pro Leu Ala Leu Leu Tyr Leu Ser Ala Leu
 35 40 45
 Ala Ala Asn Thr Leu Ile Leu Ile Ile Ile Trp Gln Asn Pro Ser Leu
 50 55 60
 Gln Gln Pro Met Tyr Ile Phe Leu Gly Ile Leu Cys Met Val Asp Met
 65 70 75 80
 Gly Leu Ala Thr Thr Ile Ile Pro Lys Ile Leu Ala Ile Phe Trp Phe
 85 90 95
 Asp Ala Lys Val Ile Ser Leu Pro Glu Arg Phe Ala Gln Ile Tyr Ala
 100 105 110
 Ile His Phe Phe Val Gly Met Glu Ser Gly Ile Leu Leu Cys Met Ala
 115 120 125

Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Pro Ser Ile
 130 135 140
 Val Thr Ser Ser Leu Ile Leu Lys Ala Thr Leu Phe Met Val Leu Arg
 145 150 155 160
 Asn Gly Leu Phe Val Thr Pro Val Pro Val Leu Ala Ala Gln Arg Asp
 165 170 175
 Tyr Cys Ser Lys Ser Glu Ile Glu His Cys Leu Cys Ser Asn Leu Gly
 180 185 190
 Val Thr Ser Leu Ala Cys Asp Asp Arg Arg Pro Asn Ser Ile Cys Gln
 195 200 205
 Leu Val Leu Ala Trp Leu Gly Met Gly Ser Asp Leu Ser Leu Ile Ile
 210 215 220
 Leu Ser Tyr Ile Leu Ile Leu Tyr Ser Val Leu Arg Leu Asn Ser Ala
 225 230 235 240
 Glu Ala Ala Ala Lys Ala Leu Ser Thr Cys Ser Ser His Leu Thr Leu
 245 250 255
 Ile Leu Phe Phe Tyr Thr Ile Val Val Val Ile Ser Val Thr His Leu
 260 265 270
 Thr Glu Met Lys Ala Thr Leu Ile Pro Val Leu Leu Asn Val Leu His
 275 280 285
 Asn Ile Ile Pro Pro Ser Leu Asn Pro Thr Val Tyr Ala Leu Gln Thr
 290 295 300
 Lys Glu Leu Arg Ala Ala Phe Gln Lys Val Leu Phe Ala Leu Thr Lys
 305 310 315 320
 Glu Ile Arg Ser

<210> 3994

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3994

Met Leu Phe Gly Ser Glu Ile Cys Lys Glu Gly Lys Cys Val Asn Thr
 1 5 10 15

Gln Pro Gly Tyr Glu Cys Tyr Cys Lys Gln Gly Phe Tyr Tyr Asp Gly
 20 25 30
 Asn Leu Leu Glu Cys Val Asp Val Asp Glu Cys Leu Asp Glu Ser Asn
 35 40 45
 Cys Arg Asn Gly Val Cys Glu Asn Thr Arg Gly Gly Tyr Arg Cys Ala
 50 55 60
 Cys Thr Pro Pro Ala Glu Tyr Ser Pro Ala Gln Arg Gln Cys Leu Ser
 65 70 75 80
 Pro Glu Glu Met Asp Val Asp Glu Cys Gln Asp Pro Ala Ala Cys Arg
 85 90 95
 Pro Gly Arg Cys Val Asn Leu Pro Gly Ser Tyr Arg Cys Glu Cys Arg
 100 105 110
 Pro Pro Trp Val Pro Gly Pro Ser Gly Arg Asp Cys Gln Leu Pro Glu
 115 120 125
 Ser Pro Ala Glu Arg Ala Pro Glu Arg Arg Asp Val Cys Trp Ser Gln
 130 135 140
 Arg Gly Glu Asp Gly Met Cys Ala Gly Pro Leu Ala Gly Pro Ala Leu
 145 150 155 160
 Thr Phe Asp Asp Cys Cys Cys Arg Gln Gly Arg Gly Trp Gly Ala Gln
 165 170 175
 Cys Arg Pro Cys Pro Pro Arg Gly Ala Gly Ser His Cys Pro Thr Ser
 180 185 190
 Gln Ser Glu Ser Asn Ser Phe Trp Asp Thr Ser Pro Leu Leu Leu Gly
 195 200 205
 Lys Pro Pro Arg Asp Glu Asp Ser Ser Glu Glu Asp Ser Asp Glu Cys
 210 215 220
 Arg Cys Val Ser Gly Arg Cys Val Pro Arg Pro Gly Gly Ala Val Cys
 225 230 235 240
 Glu Cys Pro Gly Gly Phe Gln Leu Asp Ala Ser Arg Ala Arg Cys Val
 245 250 255
 Asp Ile Asp Glu Cys Arg Glu Leu Asn Gln Arg Gly Pro Leu Cys Lys
 260 265 270
 Ser Glu Arg Cys Val Asn Thr Ser Gly Ser Phe Arg Cys Val Cys Lys
 275 280 285
 Ala Gly Phe Ala Arg Ser Arg Pro His Gly Ala Cys Val Pro Gln Arg
 290 295 300

Arg Arg

305

<210> 3995

<211> 450

<212> PRT

<213> Homo sapiens

<400> 3995

```

Met Ile Leu Leu Val Asn Leu Phe Val Leu Leu Ser Val Val Cys Val
  1             5             10             15
Leu Leu Asn Leu Ala Gly Phe Ile Leu Gly Cys Gln Gly Ala Gln Phe
      20             25             30
Val Ser Ser Val Pro Arg Cys Asp Leu Val Asp Leu Gly Glu Gly Lys
      35             40             45
Ile Cys Phe Cys Cys Glu Glu Phe Gln Pro Ala Lys Cys Thr Asp Lys
      50             55             60
Glu Asn Ala Leu Lys Leu Phe Pro Val Gln Pro Cys Ser Ala Val His
      65             70             75             80
Leu Leu Leu Lys Lys Val Leu Phe Ala Leu Cys Ala Leu Asn Ala Leu
      85             90             95
Thr Thr Thr Val Cys Leu Val Ala Ala Ala Leu Arg Tyr Leu Gln Ile
      100            105            110
Phe Ala Thr Arg Arg Ser Cys Ile Asp Glu Ser Gln Ile Ser Ala Glu
      115            120            125
Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe Val Pro
      130            135            140
Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys Thr Pro
      145            150            155            160
Arg Met Asn Arg Arg Met Val Gly Pro Asp Val Ile Pro Leu Pro His
      165            170            175
Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro Leu Asp
      180            185            190
Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln Glu Gln
      195            200            205

```


Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val Ile Pro
 210 215 220
 Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile Pro Asn
 225 230 235 240
 Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser Thr Leu
 245 250 255
 Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg Thr Arg
 260 265 270
 Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala Ala Pro
 275 280 285
 Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu Asp Leu
 290 295 300
 Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser Arg Ala Ser Arg Cys
 305 310 315 320
 Arg Pro Arg Ser Leu Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu
 325 330 335
 Leu Val Ala Arg Phe Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp
 340 345 350
 Ile His Glu Leu Val Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu
 355 360 365
 Glu His Met Glu Glu Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile
 370 375 380
 Met Ala Pro Leu Gln Pro Ser Thr Ser Arg Ala His Arg Leu Pro Ser
 385 390 395 400
 Arg Arg Gln Pro Gly Leu Leu His Leu Gln Ser Cys Gly Asp Leu His
 405 410 415
 Thr Phe Thr Pro Ala Gly Arg Pro Arg Ala Glu Arg Arg Pro Arg Arg
 420 425 430
 Val Glu Ala Glu Arg Pro His Ser Leu Ile Gly Val Ile Arg Glu Thr
 435 440 445
 Val Leu
 450

<210> 3996

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3996

```

Met Phe Lys Cys Leu Ile Phe Phe Val Ile Met Ser Gly Ile Met Ile
  1             5             10             15
Val Leu Leu Ala Glu Ser Gln Ala Arg Val Asp Thr His Ile Ser Asn
          20             25             30
Ser Lys Ala Ser Ala Leu Phe Met Met Cys Gln Tyr Pro Pro Thr His
          35             40             45
Pro Trp Ile Leu Pro Pro Pro Pro Leu Phe Tyr Arg Asn Ala Asn Thr
          50             55             60
Val Ser Cys Val Asn Ala Arg Met Tyr Ser Leu Ser Leu Leu Glu Ala
          65             70             75             80
Trp Val Arg Pro Leu Phe Gly Arg Met Glu Leu Pro Ser Phe Leu Leu
          85             90             95
Val Ser Ser Leu Ser Pro Leu Leu Leu Gln Pro Cys His Gly Ser
          100             105             110

```

<210> 3997

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3997

```

Met Ser Thr Ser Ser Tyr Asn Leu Cys Gln Gln Lys Lys Arg Arg Ala
  1             5             10             15
Leu Leu Arg Ala Ser Gly Val Lys Lys Ile Asp Val Glu Glu Lys His
          20             25             30
Glu Leu Arg Ala Ile Arg Leu Ser Arg Glu Asp Cys Gly Cys Asp Cys
          35             40             45
Arg Val Phe Cys Asp Pro Asp Thr Cys Thr Cys Ser Leu Ala Gly Ile
          50             55             60
Lys Cys Gln Val Asp Arg Met Ser Phe Pro Cys Gly Cys Thr Lys Glu
          65             70             75             80

```

Gly Cys Ser Asn Thr Ala Gly Arg Ile Glu Phe Asn Pro Ile Arg Val
 85 90 95
 Arg Thr His Phe Leu His Thr Ile Met Lys Leu Glu Leu Glu Lys Asn
 100 105 110
 Arg Glu Gln Gln Ile Pro Thr Leu Asn Gly Cys His Ser Glu Ile Ser
 115 120 125
 Ala His Ser Ser Ser Met Gly Pro Val Ala His Ser Val Glu Tyr Ser
 130 135 140
 Ile Ala Asp Ser Phe Glu Ile Glu Thr Glu Pro Gln Ala Ala Val Leu
 145 150 155 160
 His Leu Gln Ser Ala Glu Glu Leu Asp Cys Gln Gly Glu Glu Glu Glu
 165 170 175
 Glu Glu Glu Asp Gly Ser Ser Phe Cys Ser Gly Val Thr Asp Ser Ser
 180 185 190
 Thr Gln Ser Leu Ala Pro Ser Glu Ser Asp Glu Glu Glu Glu Glu Glu
 195 200 205
 Glu Glu Glu Glu Glu Glu Glu Asp Asp Asp Asp Asp Lys Gly Asp Gly
 210 215 220
 Phe Val Glu Gly Leu Gly Thr His Ala Glu Val Val Pro Leu Pro Ser
 225 230 235 240
 Val Leu Cys Tyr Ser Asp Gly Thr Ala Val His Glu Ser His Ala Lys
 245 250 255
 Asn Ala Ser Phe Tyr Ala Asn Ser Ser Thr Leu Tyr Tyr Gln Asn Asp
 260 265 270
 Ser Gly Val Pro Cys Asn Ser Leu Tyr Pro Glu His Arg Ser Asn His
 275 280 285
 Pro Gln Val Glu Phe His Ser Tyr Leu Lys Gly Pro Ser Gln Glu Gly
 290 295 300
 Phe Val Ser Ala Leu Asn Gly Asp Ser His Ile Ser Glu His Pro Ala
 305 310 315 320
 Glu Asn Ser Leu Ser Leu Ala Glu Lys Ser Ile Leu His Glu Glu Cys
 325 330 335
 Ile Lys Ser Pro Val Val Glu Thr Val Pro Val
 340 345

<210> 3998

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3998

```

Met Gly Glu Arg Lys Gly Ile Cys Glu Gly Asp Trp Leu Ala Lys Pro
 1             5             10             15
Lys Ile Phe Leu Met Trp Pro Tyr Ile Glu Lys Ala Cys Val Phe Trp
          20             25             30
Thr Arg Ala Ile Lys Gly Asn Ser Leu Asp Leu Lys Leu Leu Lys Ile
          35             40             45
Asn Ser Ala Gln Ile Ala Leu Gly Ser Gln Arg Pro Cys Trp Ser Ser
          50             55             60
Lys Gly Ser Val Gln Ser Val Val Ser Lys Asp Arg Ser Gln Leu Ser
          65             70             75             80
Gln Glu Ser Glu Tyr Lys Tyr Ser Glu Pro Ile Asn Arg Gln Ile Ile
          85             90             95
Ile Tyr Thr Met Ser Gln Pro Val Asp Gly Ile Ile Cys His His
          100            105            110

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<210> 3999

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3999

```

Met Arg Val Thr Ala Pro Arg Thr Leu Leu Leu Leu Trp Gly Ala
 1             5             10             15
Val Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
          20             25             30
His Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Thr
          35             40             45
Val Gly Tyr Val Asp Asp Thr Leu Phe Val Arg Phe Asp Ser Asp Ala
          50             55             60

```

Thr Ser Pro Arg Lys Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80
 Pro Glu Tyr Trp Asp Gln Glu Thr Gln Ile Ser Lys Thr Asn Thr Gln
 85 90 95
 Thr Tyr Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Pro Gly
 100 105 110
 Arg Arg Ser Arg Leu Pro Ile Pro His Val Arg Pro Gly Ser Pro Arg
 115 120 125
 Val Ser Gly Ser Glu Ile Arg Pro Arg Gly Arg Gly Thr Arg Pro Asp
 130 135 140
 Pro Arg Pro Ala Arg Ala Pro Gly Ala Phe Thr Arg Phe His Phe Gln
 145 150 155 160
 Leu Arg Pro Lys Ser Pro Arg Val Gly Arg Gly Gly Ala Gly Leu Gly
 165 170 175
 Gly Thr Gly Leu Thr Ala Gly Ala Gly Pro Gly Ser His Thr Leu Gln
 180 185 190
 Ser Met Tyr Gly Cys Asp Val Gly Pro Asp Gly Arg Leu Leu Arg Gly
 195 200 205
 His Asn Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu Asn Glu
 210 215 220
 Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr Ala Ala Gln Ile Thr Gln
 225 230 235 240
 Arg Lys Trp Glu Ala Ala Arg Val Ala Glu Gln Leu Arg Ala Tyr Leu
 245 250 255
 Glu Gly Glu Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
 260 265 270
 Glu Thr Leu Gln Arg Ala Asp Pro Pro Lys Thr His Val Thr His His
 275 280 285
 Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe
 290 295 300
 Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
 305 310 315 320
 Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Arg Thr
 325 330 335
 Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Glu Glu Gln Arg
 340 345 350

<211> 145

<212> PRT

〈213〉 Homo sapiens

<400> 4000

Met	Lys	Trp	Val	Glu	Met	Thr	Ser	His	Trp	Glu	Lys	Thr	Met	Ser	Arg
1				5					10					15	
Arg	Tyr	Lys	Lys	Val	Arg	Gly	Ala	Gly	Ala	Pro	Leu	Gly	Phe	His	Gly
				20					25					30	
Ser	Phe	Leu	Ser	Ala	Ser	Ala	His	Ile	Leu	Ala	Lys	Cys	Thr	His	Pro
				35					40					45	
Val	Ser	Gln	His	Leu	Arg	Pro	Leu	Leu	Pro	Ala	Thr	Gln	Ser	Gly	Pro
				50					55					60	
Leu	Pro	Ala	Asp	Glu	Leu	Cys	Leu	Gly	Pro	Ala	Ser	Arg	Ser	Tyr	Gly
65															
				70											
Gly	Cys	Leu	Val	Glu	Pro	Leu	Ala	Ser	Pro	Thr	Gly	Lys	Asp	Ala	Val
				85										95	
Pro	Glu	Arg	His	Pro	Val	Cys	Pro	Ala	Arg	Pro	Met	Leu	Ala	Pro	Val
				100					105					110	
Val	Trp	Gly	Pro	Cys	Val	Pro	Glu	Glu	Gln	Pro	Trp	His	Leu	Ser	Gly
				115					120					125	

Glu Gly Val Gly Arg Gly Pro Asn Ser Pro Thr Gln Ser Pro Ser Pro
 130 135 140

His

145

<210> 4001

<211> 468

<212> PRT

<213> Homo sapiens

<400> 4001

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly
 1 5 10 15
 Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Arg
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Asp Phe
 35 40 45
 Ser Tyr Tyr Trp Met Ala Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ala Asn Ile Arg Lys Asp Gly Ser Asp Lys Tyr Tyr Val
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Ser Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Ser Leu Tyr Leu Gln Met Thr Ser Leu Arg Ala Asn Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Thr Val Pro Asp Leu Asp Ser Asp Ser Phe Leu Trp
 115 120 125
 Gly Arg Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 130 135 140
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 145 150 155 160
 Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 165 170 175
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 180 185 190

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 195 200 205
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 210 215 220
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 225 230 235 240
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 245 250 255
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 260 265 270
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
 275 280 285
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 290 295 300
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 305 310 315 320
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 325 330 335
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
 340 345 350
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 355 360 365
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 370 375 380
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 385 390 395 400
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 405 410 415
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 420 425 430
 Val Gly Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 435 440 445
 Met His Glu Gly Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 450 455 460
 Ser Pro Gly Lys
 465

<210> 4002

<211> 159

<212> PRT

<213> Homo sapiens

<400> 4002

```

Met Asp Met Gly Leu Lys Leu Gly His Pro Thr Leu Thr Gly Asn Trp
  1             5             10             15
Gln Ile Ser Asp Pro Asn Ala Leu Ser Pro Pro Ser Pro Leu Thr Pro
      20             25             30
Gln Pro Ala Ile Thr Lys Arg Pro Lys Ala Cys Phe Phe His Gln Pro
      35             40             45
Pro Ala Gln Phe Leu Phe Ser Thr Arg Lys Ala Gly Val Val Leu Thr
      50             55             60
Pro Tyr Ile Pro Pro Ala Pro Arg Arg Ile Gly Phe Thr Val Gly Arg
      65             70             75             80
Val Ala Ile Lys Pro Glu Pro Ser Gln Pro Thr Arg Ser Gln Arg Glu
      85             90             95
Lys Ala Arg Gly Gly Arg Thr Ser Val Val Leu Ser Ile Asn Trp Leu
      100            105            110
Trp Gly Gly Gly Met Gly Trp Ser Ser His Leu Ala Ser His Leu Val
      115            120            125
Met Arg Thr Ser Lys Asn Leu Gln Gln Glu Arg Ser Phe His Ser Lys
      130            135            140
Val Lys Gly Arg Gly Ala Ala Ala Leu Gly Leu Pro Gly Arg Asn
      145            150            155

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<210> 4003

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4003

Met Ser Ala Pro Pro Ala Leu Gln Ile Arg Glu Ala Asn Ala His Leu
 1 5 10 15
 Ala Ala Val His Arg Arg Ala Ala Glu Leu Glu Ala Arg Leu Asp Ala
 20 25 30
 Ala Glu Arg Thr Val His Ala Gln Ala Glu Arg Leu Ala Leu His Asp
 35 40 45
 Gln Gln Leu Arg Ala Ala Leu Asp Glu Leu Gly Arg Ala Lys Asp Arg
 50 55 60
 Glu Ile Ala Thr Leu Gln Glu Gln Leu Met Thr Ser Glu Ala Thr Val
 65 70 75 80
 His Ser Leu Gln Ala Thr Val His Gln Arg Asp Glu Leu Ile Arg Gln
 85 90 95
 Leu Gln Pro Arg Ala Glu Leu Leu Gln Asp Ile Cys Arg Arg Arg Pro
 100 105 110
 Pro Leu Ala Gly Leu Leu Asp Ala Leu Ala Glu Ala Glu Arg Leu Gly
 115 120 125
 Pro Leu Pro Ala Ser Asp Pro Gly His Pro Pro Pro Gly Gly Pro Gly
 130 135 140
 Pro Pro Leu Asp Asn Ser Thr Gly Glu Glu Ala Asp Arg Asp His Leu
 145 150 155 160
 Gln Pro Ala Val Phe Gly Thr Thr Val
 165

<210> 4004

<211> 266

<212> PRT

<213> Homo sapiens

<400> 4004

Met Met Ala Leu Trp Ser Leu Leu His Leu Thr Phe Leu Gly Phe Ser
 1 5 10 15
 Ile Thr Leu Leu Leu Val His Gly Gln Gly Phe Gln Gly Thr Ala Ala
 20 25 30
 Ile Trp Pro Ser Leu Phe Asn Val Asn Leu Ser Lys Lys Val Gln Glu
 35 40 45

Ser Ile Gln Ile Pro Asn Asn Gly Ser Ala Pro Leu Leu Val Asp Val
 50 55 60
 Arg Val Phe Val Ser Asn Val Phe Asn Val Asp Ile Leu Arg Tyr Thr
 65 70 75 80
 Met Ser Ser Met Leu Leu Leu Arg Leu Ser Trp Leu Asp Thr Arg Leu
 85 90 95
 Ala Trp Asn Thr Ser Ala His Pro Arg His Ala Ile Thr Leu Pro Trp
 100 105 110
 Glu Ser Leu Trp Thr Pro Arg Leu Thr Ile Leu Glu Ala Leu Trp Val
 115 120 125
 Asp Trp Arg Asp Gln Ser Pro Gln Ala Arg Val Asp Gln Asp Gly His
 130 135 140
 Val Lys Leu Asn Leu Ala Leu Thr Thr Glu Thr Asn Cys Asn Phe Glu
 145 150 155 160
 Leu Leu His Phe Pro Arg Asp His Ser Asn Cys Ser Leu Ser Phe Tyr
 165 170 175
 Ala Leu Ser Asn Thr Gly Ala Asp Arg Ala Gly Ala Ala Gly Leu Arg
 180 185 190
 Arg Gly Gly Gly Arg Trp Gly Arg Gly Thr Pro Arg Ser Val Val Gln
 195 200 205
 Gly Gln Gly Ala Gly Gln Gly Glu Gly Ala Lys Ala Asp Arg Arg Arg
 210 215 220
 Thr Pro Arg Ser Val Phe Arg Ala Val Tyr Pro Arg Leu Arg Arg Ala
 225 230 235 240
 Ala Pro Ala Leu Pro Leu Arg Pro Pro Leu Glu Trp Gln Pro Ile Ser
 245 250 255
 Val Leu Ser Gly Ser Leu Arg Ala Pro Leu
 260 265

<210> 4005

<211> 519

<212> PRT

<213> Homo sapiens

<400> 4005

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Gly
1				5					10					15	
Val	Gln	Ser	Gln	Val	Gln	Val	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
			20					25					30		
Pro	Gly	Ser	Ser	Val	Lys	Leu	Ser	Cys	Lys	Ala	Pro	Gly	Val	Thr	Leu
		35					40					45			
Thr	Ser	Tyr	Ser	Leu	Thr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu
	50					55					60				
Glu	Trp	Met	Gly	Arg	Ile	Val	Pro	Thr	Val	Gly	Ile	Ala	Thr	Ile	Gly
65					70					75				80	
Gln	Asn	Phe	Lys	Gly	Arg	Val	Thr	Ile	Thr	Ala	Asp	Lys	Ser	Thr	Arg
			85					90					95		
Thr	Ala	Tyr	Leu	Glu	Val	Asn	Ser	Leu	Gly	Ser	Glu	Asp	Thr	Ala	Thr
		100						105					110		
Tyr	Tyr	Cys	Ala	Ser	Gly	Gln	Asp	Val	Asp	Phe	Arg	Arg	Gly	Val	Ala
		115					120					125			
Phe	Glu	Met	Trp	Gly	Gln	Gly	Thr	Met	Val	Ile	Val	Ser	Ser	Ala	Ser
	130					135					140				
Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr
145					150					155				160	
Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro
			165					170					175		
Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val
		180						185					190		
His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser
		195					200					205			
Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Thr
	210					215					220				
Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Arg	Val
225				230					235					240	
Glu	Leu	Lys	Thr	Pro	Leu	Gly	Asp	Thr	Thr	His	Thr	Cys	Pro	Arg	Cys
			245					250					255		
Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys	Pro
		260						265					270		
Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys	Pro	Glu

275	280	285
Pro Lys Ser Cys Asp Thr	Pro Pro Cys Pro Arg Cys	Pro Ala Pro
290	295	300
Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys		
305	310	315
Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val		
325	330	335
Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr Val Asp		
340	345	350
Gly Val Glu Val His Asn Ala Lys Thr Lys Leu Arg Glu Glu Gln Tyr		
355	360	365
Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp		
370	375	380
Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu		
385	390	395
Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg		
405	410	415
Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys		
420	425	430
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp		
435	440	445
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Asn		
450	455	460
Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser		
465	470	475
Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe Ser		
485	490	495
Cys Ser Val Met His Glu Ala Leu His Asn Arg Tyr Thr Gln Lys Ser		
500	505	510
Leu Ser Leu Ser Pro Gly Lys		
515		

<210> 4006

<211> 186

<212> PRT

<213> Homo sapiens

<400> 4006

Met Ser Lys Ala Gln Cys Ile Val Ala Asn Glu Ala Met Ala Pro Val
 1 5 10 15
 Val Asn Ser Ala Val Ser Asp Cys Pro Thr Leu Lys Thr Lys Leu Leu
 20 25 30
 Val Ser Asp Lys Ser Tyr Asp Gly Trp Leu Asp Phe Lys Lys Leu Ile
 35 40 45
 Gln Val Ala Pro Pro Lys Gln Thr Tyr Met Arg Thr Lys Ser Gln Asp
 50 55 60
 Pro Met Ala Ile Phe Phe Thr Lys Gly Thr Thr Gly Ala Pro Lys Met
 65 70 75 80
 Val Glu Tyr Ser Gln Tyr Gly Leu Gly Met Gly Phe Ser Gln Ala Ser
 85 90 95
 Arg Arg Trp Met Asp Leu Gln Pro Thr Asp Val Leu Trp Ser Leu Gly
 100 105 110
 Asp Ala Phe Gly Gly Ser Leu Ser Leu Ser Ala Val Leu Gly Thr Trp
 115 120 125
 Phe Gln Gly Ala Cys Val Phe Leu Cys His Met Pro Thr Phe Cys Pro
 130 135 140
 Glu Thr Val Leu Asn Val Leu Ser Arg Phe Pro Ile Thr Thr Leu Ser
 145 150 155 160
 Ala Asn Pro Glu Met Tyr Gln Glu Leu Leu Gln His Lys Cys Phe Thr
 165 170 175
 Arg Val Tyr Ser Val Pro Leu Pro Lys Gln
 180 185

<210> 4007

<211> 119

<212> PRT

<213> Homo sapiens

<400> 4007

Met Glu Glu Val Ile Phe Glu Glu Arg Ser Glu Glu Gly Lys Gly Val

1 5 10 15
 Gly Thr Glu Asp Ile Gly Gly Thr Val Leu Pro Glu Thr Ser Gly Gln
 20 25 30
 Pro Gly Thr Gly Thr Thr Ser Arg Lys Gly Ser Cys Glu Gly Phe Val
 35 40 45
 Phe Ser Leu Gln Phe Val Asn Val Asn Thr Met Leu Thr Pro Lys Asn
 50 55 60
 Ser Lys Phe Pro Thr Trp Leu Leu Cys Leu Pro Pro Ser Phe Pro Pro
 65 70 75 80
 Phe Leu Pro Pro Ser Phe Leu Ser Ser Phe Leu Pro Ser Val Leu Pro
 85 90 95
 Phe Phe Pro Ile Cys Pro Thr Ser Met Asp Glu Phe Ser Ser Ser Leu
 100 105 110
 Gly Cys Phe Leu His Cys Thr
 115

<210> 4008

<211> 219

<212> PRT

<213> Homo sapiens

<400> 4008

Met Gly Pro Leu Ser Pro Tyr Ala Trp Ala Phe Ser His Thr Val Glu
 1 5 10 15
 Cys Ile Phe Ile Phe Asn Lys Ser Leu His Ala Phe Leu Ala Leu Cys
 20 25 30
 Val Leu Ser Asn Ser Leu Leu Lys Thr Ser Arg Thr Trp Thr Pro Thr
 35 40 45
 Thr Gly Asn Val Tyr Phe Gly Gln Pro Gly Gly Arg Ser Lys Pro Lys
 50 55 60
 Val Trp Asp Ser Phe Phe Ser Leu Ser Phe Leu Leu His Thr Arg Ala
 65 70 75 80
 Phe Ser Phe His Phe Gln Leu Gly Thr Leu Gly Gly Gln His Leu Asn
 85 90 95
 Val Glu Ala Thr Ala Gly Phe Trp Leu Trp Pro Val Lys Leu Met Gly

```

          100              105              110
Phe Arg Ala Glu Lys Ala Asp Cys His Leu Leu Val Cys Leu Arg Asn
          115              120              125
Leu Gly Leu Phe His Phe Phe Phe Leu Tyr Phe Ser Val Phe Lys Ser
          130              135              140
Leu Phe Ile Ile Ala Leu Pro Arg Arg Gly Asn Asp Phe Phe Phe Tyr
145              150              155              160
Leu Phe Cys Thr Trp Ser Pro Ile Pro Met Cys Gly Ala Val Gln Ser
          165              170              175
Lys Leu Ala His Val Leu Arg Asp Leu Asn Leu Leu Met Leu Asn Ser
          180              185              190
Ser Leu Thr Val Leu Asn Trp Leu Arg Asn Lys Lys Ala His Pro Ala
          195              200              205
Ser Ser Ser His Cys Ser Ser Trp Leu Phe Leu
          210              215

```

<210> 4009

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4009

```

Met Ala Leu Gly Phe Pro Gly Leu Gly Gly Gly Ser Cys Gly Arg
  1              5              10              15
Gln Glu Gly Gly Arg Tyr Ser Phe Pro Arg Ala His Ala Gly Leu Ala
          20              25              30
Gln Ala Gly Trp Ala Ser Pro Ser Leu Ser Ala Gly Ser Arg His Cys
          35              40              45
Pro His Pro Val Thr Pro Leu Gln Leu Phe Phe Leu Phe Pro Thr Ala
          50              55              60
Ser Leu Val Asp Ala Pro Ser Glu Gln Pro Cys Thr Glu Pro Arg Ala
          65              70              75              80
Gly Pro Gly Arg Cys Thr Leu Ala Leu Gly Asp Ser Ser Phe Thr Glu
          85              90              95
Thr Thr Ile Ile Leu Trp Phe Gln Gly Gly Asn

```


100

105

<210> 4010

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4010

```

Met Tyr Ile Gln Phe Cys Ile Thr Leu Phe Ser Phe Ser Phe Phe Phe
  1             5             10             15
Phe Phe Phe Phe Cys Phe Leu Arg Gln Gly Leu Pro Leu Ser Leu Arg
      20             25             30
Leu Gln Cys Ser Gly Thr Ile Leu Ala His Cys Asn Leu Arg Phe Leu
      35             40             45
Gly Ser Asn Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Trp Thr Thr
      50             55             60
Gly Val His His His Ile Ser Leu Ile Phe Val Phe Val Glu Met Arg
      65             70             75             80
Phe Cys Cys Val Ala Gln Val Gly Leu Glu Tyr Leu Gly Ser Ser Glu
      85             90             95
Leu Ser Ala Leu Asp Ser Gln Ser Ala Gly Ile Thr Gly Val Ser Gln
      100            105            110
Cys Ala Trp Pro Ala Leu Cys Phe Phe Ser Phe Ala Val Ala Cys Tyr
      115            120            125

```

<210> 4011

<211> 167

<212> PRT

<213> Homo sapiens

<400> 4011

```

Met Gly Pro Val Cys Arg Gly Ser Ser Gly Pro Leu Arg Val Ala Gly
  1             5             10             15
Gly Ser Trp Thr Cys Leu Gly Gly Gln Thr Pro Gly Arg Gly Gln Leu

```

20 25 30
 Arg Arg Ser Ala Ser Asp Phe Ser Gly His Leu Gly Ser Pro Ile Pro
 35 40 45
 Ile Ala Pro Gly Leu Asp Pro Leu Pro Val Leu Ser Thr Phe Ser Val
 50 55 60
 Thr Leu Asn Ala Leu Pro Ala Ile Ser Ala Ser Gly Arg Ile His Glu
 65 70 75 80
 Gly Val Gly Arg Asp Val Arg Pro Gly Phe Gly Ser Gln Leu Ser His
 85 90 95
 Leu Ile Ala Met Arg Pro Cys Thr Ile Pro Phe Asn Phe Pro Ser Leu
 100 105 110
 Ser Phe Phe Leu Cys Lys Met Gly Ile Gln Arg Asp Ser Leu Leu Ala
 115 120 125
 Arg Asp Ser Trp Cys Leu Ile Arg Leu Lys Leu Pro Tyr Leu Gln Ser
 130 135 140
 Lys Lys Pro Cys Asp Glu Lys Leu Phe Cys Gln Tyr Ala Ala Asn Ser
 145 150 155 160
 Phe Gly Pro Gln Asn Leu Thr
 165

<210> 4012

<211> 534

<212> PRT

<213> Homo sapiens

<400> 4012

Met Glu Phe Gly Val Phe Pro Met Glu Ala Thr His Ser Ser Ile Asp
 1 5 10 15
 Glu Glu Gly Tyr Ile Gln Gly Ser Gln Arg Asp Arg Gly Ser Ser Leu
 20 25 30
 Val Asp Thr Glu Glu Ala Lys Thr Lys Ser Glu Asn Val Leu His Asp
 35 40 45
 Gln Ala Ala Lys Val Asp Lys Asp Asp Gly Lys Glu Thr Gly Glu Thr
 50 55 60
 Phe Thr Phe Lys Arg His Ser Gln Asp Ala Ser Gln Asp Val Lys Leu

65	70	75	80
Tyr Ser Asp Thr Ala Pro Thr Glu Asp Leu Ile Glu Glu Val Thr Ala			
	85	90	95
Asp His Pro Glu Val Val Thr Met Ile Glu Glu Thr Ile Lys Met Ser			
	100	105	110
Gln Asp Ile Asn Phe Glu Gln Pro Tyr Glu Lys His Ala Glu Ile Leu			
	115	120	125
Gln Glu Val Leu Gly Glu Val Met Glu Glu Asn Lys Asp Arg Phe Pro			
	130	135	140
Gly Ala Pro Lys Tyr Gly Gly Trp Ile Val Asp Asn Cys Pro Ile Val			
145	150	155	160
Lys Glu Leu Trp Met Ala Leu Ile Lys Lys Gly Ile Ile Pro Asp Leu			
	165	170	175
Val Ile Tyr Leu Ser Asp Thr Glu Asn Asn Gly Lys Cys Leu Phe Asn			
	180	185	190
Arg Ile Tyr Leu Gln Lys Lys Ser Glu Ile Asp Ser Lys Ile Leu Glu			
	195	200	205
Arg Leu Leu Glu Glu Leu Gln Lys Lys Lys Lys Glu Glu Glu Glu Ala			
	210	215	220
Arg Lys Ala Thr Glu Glu Glu Leu Arg Leu Glu Glu Glu Asn Arg Arg			
225	230	235	240
Leu Leu Glu Leu Met Lys Val Lys Ala Lys Glu Ala Glu Glu Thr Asp			
	245	250	255
Asn Glu Val Glu Glu Glu Ile Glu Gly Asp Glu Leu Glu Val His Glu			
	260	265	270
Glu Pro Glu Ala Ser His Asp Thr Arg Gly Ser Trp Leu Pro Glu Glu			
	275	280	285
Phe Glu Ala Ser Glu Val Pro Glu Thr Glu Pro Glu Ala Val Ser Glu			
	290	295	300
Pro Ile Glu Glu Thr Thr Val Glu Thr Glu Ile Pro Lys Gly Ser Lys			
305	310	315	320
Glu Gly Leu Glu Ile Glu Lys Leu Ser Glu Thr Val Val Leu Pro Glu			
	325	330	335
Phe Pro Glu Asp Ser Tyr Pro Asp Val Pro Glu Met Glu Pro Phe Lys			
	340	345	350
Glu Lys Ile Gly Ser Phe Ile Ile Leu Trp Lys Gln Leu Glu Ala Thr			

355 360 365
 Ile Ser Glu Ala Tyr Ile Lys Ile Leu Asn Leu Glu Ile Ala Asp Arg
 370 375 380
 Thr Pro Gln Glu Leu Leu Gln Lys Val Val Glu Thr Met Glu Lys Pro
 385 390 395 400
 Phe Gln Tyr Thr Ala Trp Glu Leu Thr Gly Glu Asp Tyr Glu Glu Glu
 405 410 415
 Thr Glu Asp Tyr Gln Thr Glu Ala Glu Val Asp Glu Glu Leu Glu Glu
 420 425 430
 Glu Glu Glu Glu Glu Gly Glu Asp Lys Met Lys Glu Arg Lys Arg His
 435 440 445
 Leu Gly Asp Thr Lys His Phe Cys Pro Val Val Leu Lys Glu Asn Phe
 450 455 460
 Ile Leu Gln Pro Gly Asn Thr Glu Glu Ala Ala Lys Tyr Arg Glu Lys
 465 470 475 480
 Ile Tyr Tyr Phe Ser Ser Ala Glu Ala Lys Glu Lys Phe Leu Glu His
 485 490 495
 Pro Glu Asp Tyr Val Ala His Glu Glu Pro Leu Lys Val Arg Gln Tyr
 500 505 510
 Ser Tyr Leu Asn Asp Cys Ser His Arg Ile Phe Leu Gly Leu Ile Thr
 515 520 525
 Asn His His Gln Phe Thr
 530

<210> 4013

<211> 572

<212> PRT

<213> Homo sapiens

<400> 4013

Met Ala Ser Ser Glu Thr Glu Ile Arg Trp Ala Glu Pro Gly Leu Gly
 1 5 10 15
 Lys Gly Pro Gln Arg Arg Arg Trp Ala Trp Ala Glu Asp Lys Arg Asp
 20 25 30
 Val Asp Arg Ser Ser Ser Gln Ser Trp Glu Glu Glu Arg Leu Phe Pro

35	40	45
Asn Ala Thr Ser Pro Glu Leu Leu Glu Asp Phe Arg Leu Ala Gln Gln		
50	55	60
His Leu Pro Pro Leu Glu Trp Asp Pro His Pro Gln Pro Asp Gly His		
65	70	75
Gln Asp Ser Glu Ser Gly Glu Thr Ser Gly Glu Glu Ala Glu Ala Glu		
85	90	95
Asp Val Asp Ser Pro Ala Ser Ser His Glu Pro Leu Ala Trp Leu Pro		
100	105	110
Gln Gln Gly Arg Gln Leu Asp Met Thr Glu Glu Glu Pro Asp Gly Thr		
115	120	125
Leu Gly Ser Leu Glu Val Glu Glu Ala Gly Glu Ser Ser Ser Arg Leu		
130	135	140
Gly Tyr Glu Ala Gly Leu Ser Leu Glu Gly His Gly Asn Thr Ser Pro		
145	150	155
Met Ala Leu Gly His Gly Gln Ala Arg Gly Trp Val Ala Ser Gly Glu		
165	170	175
Gln Ala Ser Gly Asp Lys Leu Ser Glu His Ser Glu Val Asn Pro Ser		
180	185	190
Val Glu Leu Ser Pro Ala Arg Ser Trp Ser Ser Gly Thr Val Ser Leu		
195	200	205
Asp His Pro Ser Asp Ser Leu Asp Ser Thr Trp Glu Gly Glu Thr Asp		
210	215	220
Gly Pro Gln Pro Thr Ala Leu Ala Glu Thr Leu Pro Glu Gly Pro Ser		
225	230	235
His His Leu Leu Ser Pro Asp Gly Arg Thr Gly Gly Ser Val Ala Arg		
245	250	255
Ala Thr Pro Met Glu Phe Gln Asp Ser Ser Ala Pro Pro Ala Gln Ser		
260	265	270
Pro Gln His Ala Thr Asp Arg Trp Arg Arg Glu Thr Thr Arg Phe Phe		
275	280	285
Cys Pro Gln Pro Lys Glu His Ile Trp Lys Gln Thr Lys Thr Ser Pro		
290	295	300
Lys Pro Leu Pro Ser Arg Phe Ile Gly Ser Ile Ser Pro Leu Asn Pro		
305	310	315
Gln Pro Arg Pro Thr Arg Gln Gly Arg Pro Leu Pro Arg Gln Gly Ala		

	325		330		335
Thr	Leu	Ala	Gly	Arg	Ser
		Ser	Ser	Ser	Asn
			Ala	Pro	Lys
				Tyr	Gly
				Arg	Gly
	340		345		350
Gln	Leu	Asn	Tyr	Pro	Leu
		Pro	Asp	Phe	Ser
			Lys	Val	Gly
				Pro	Arg
				Val	
	355		360		365
Arg	Phe	Pro	Lys	Asp	Glu
		Ser	Tyr	Arg	Pro
			Pro	Lys	Ser
				Arg	Ser
				His	
	370		375		380
Asn	Arg	Lys	Pro	Gln	Ala
		Pro	Ala	Arg	Pro
			Leu	Ile	Phe
				Lys	Ser
				Pro	
	385		390		395
					400
Ala	Glu	Ile	Val	Gln	Glu
		Val	Leu	Leu	Ser
				Ser	Gly
				Glu	Ala
				Ala	Leu
	405		410		415
Ala	Lys	Asp	Thr	Pro	Pro
		Ala	His	Pro	Ile
			Thr	Arg	Val
				Pro	Gln
				Glu	
	420		425		430
Phe	Gln	Thr	Pro	Glu	Gln
		Ala	Thr	Glu	Leu
			Val	His	Gln
				Leu	Gln
				Val	
	435		440		445
Ser	Gly	Thr	His	Gly	Cys
		Gly	Cys	Val	Thr
			Lys	Ala	Pro
				Val	Gly
				Leu	
	450		455		460
Gly	Trp	Arg	Leu	Ile	Gly
		Val	Gly	Arg	Pro
			Gly	Val	Glu
				Ala	Gly
				Trp	
	465		470		475
					480
Gly	Gly	Glu	Ala	Trp	Asp
		Arg	Ala	Trp	Leu
			Gly	Trp	Glu
				Ala	Leu
				Gly	
	485		490		495
Arg	Arg	Leu	Val	Gly	Trp
		Gly	Gly	Leu	Gly
			Trp	Arg	Leu
				Ala	Arg
				Val	
	500		505		510
Gly	Ser	Pro	Gly	Met	Glu
		Ala	Ser	Gly	Val
			Gly	Arg	Pro
				Gly	Val
				Glu	Ala
	515		520		525
Ser	Pro	Gly	Val	Glu	Pro
		Gly	Gly	Val	Gly
			Arg	Pro	Gly
				Val	Glu
				Ala	
	530		535		540
Gly	Trp	Gly	Arg	Lys	Pro
		Trp	Asp	Arg	Gly
			Trp	Trp	Gly
				Gly	Glu
				Ala	
	545		550		555
					560
Trp	Gly	Gly	Gly	Trp	Leu
		Gly	Gln	Glu	Ala
				Leu	Gly
	565		570		

<210> 4014

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4014

```

Met Ser Met Gln Arg Leu Ala Pro Lys Lys Thr Arg Lys Glu Gln Ser
 1             5             10             15
Ala Asn Asp His Pro Ile Gly Gly Pro Glu Gly Arg Leu Phe Thr Ser
      20             25             30
Gln Leu Gln Leu Lys Phe Arg Ala Leu Ser Glu Arg Asn Ser Trp Leu
      35             40             45
Glu Val Ser Arg Ala Val Thr Pro Thr Ser Ala Ala Val Thr Ser Thr
      50             55             60
Pro Ser Thr Ser Lys Pro Arg Gln Lys Arg Pro Thr Asn Ser Gln Ser
      65             70             75             80
Arg Ser Ala Ala Lys Pro Thr Pro Val Val Phe Leu Gln Lys Ile Ile
      85             90             95
Asn Cys Gly Glu Glu Glu Gly Lys
      100

```

<210> 4015

<211> 226

<212> PRT

<213> Homo sapiens

<400> 4015

```

Met Gly Phe Cys Tyr Val Ala Gln Ala Gly Leu Lys Leu Leu Gly Ser
 1             5             10             15
Ser Asp Leu Pro Thr Leu Ala Ser Gln Ser Ala Arg Ile Thr Gly Met
      20             25             30
Ser His Trp Ala Trp Pro Ser Leu Phe Ser Tyr Phe Leu Gly Thr Cys
      35             40             45
Arg Pro Glu Ile His Met His Leu Ser Leu Leu Pro Asp Arg Arg Thr
      50             55             60
His Trp Asn Val Gly Ile Asp Phe Thr Ala Ser Asn Gly Asn Pro Leu
      65             70             75             80

```

Asp Pro Ser Ser Leu His Tyr Ile Asn Pro Met Gly Thr Asn Glu Tyr
 85 90 95
 Leu Ser Ala Ile Trp Ala Val Gly Gln Ile Ile Gln Asp Tyr Asp Ser
 100 105 110
 Asp Lys Met Phe Pro Ala Leu Gly Phe Gly Ala Gln Leu Pro Pro Asp
 115 120 125
 Trp Lys Gln Tyr Phe Ile Leu Leu Ile Ile Thr Asp Gly Val Ile Ser
 130 135 140
 Asp Met Glu Glu Thr Arg His Ala Val Val Gln Ala Ser Lys Leu Pro
 145 150 155 160
 Met Ser Ile Ile Ile Val Gly Val Gly Asn Ala Asp Phe Ala Ala Met
 165 170 175
 Glu Phe Leu Asp Gly Asp Ser Arg Met Leu Arg Ser His Thr Gly Glu
 180 185 190
 Glu Ala Ala Arg Asp Ile Val Gln Phe Val Pro Phe Arg Glu Phe Arg
 195 200 205
 Asn Val Ser Val Gly Leu Gly Trp Glu Gly Ala Val Thr Gly Ser Gln
 210 215 220
 Pro Pro
 225

<210> 4016

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4016

Met Gly Arg Arg Asp Gly Asp Glu Arg Ser Cys Ser Gly Leu Gly Thr
 1 5 10 15
 Pro Lys Ala Ala Asp Ser Ile Trp Leu Ser Val Pro Gln Ser Pro Leu
 20 25 30
 Leu Cys Thr Lys Phe Thr Val Leu Ala Leu Lys Ser Asn Phe Glu Phe
 35 40 45
 Ser Lys Asp Val Cys Ile Ala His Ala Asn Glu Leu Ser Val His Trp


```

      50              55              60
Asn Asp Thr Ile Thr Thr Gln Met Lys Arg Thr Gly Trp Asn Ile His
 65              70              75              80
Gln Pro Thr Asn Val Ile Ser Gln Pro Thr Leu Gln Thr Pro Ser Gln
      85              90              95
Lys Ser Ile Gln Phe Arg Ile Ala His Cys Trp Gln Arg Lys Asn Val
      100             105             110
Thr Asn Leu Phe Thr Gly Glu Tyr
      115             120

```

<210> 4017

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4017

```

Met Thr Ser Cys Ser Met Ala Pro Ser Thr Pro Ser Ser Ser Ser Gly
 1              5              10              15
Ala Lys Ala Trp Arg Arg Ser Pro Glu Ala Pro Ser Pro Trp Ser Cys
      20              25              30
Ser Ser Glu Cys Arg His Asn Glu Ala Tyr Thr Trp Thr Asn Pro Thr
      35              40              45
Cys Cys Val His Asn Val Ile Ile Gly Lys Leu Trp Ile Glu Gln Tyr
      50              55              60
Gly Thr Val Glu Ile Leu Asn His Arg Thr Gly His Lys Cys Val Leu
 65              70              75              80
His Phe Lys Pro Cys Gly Leu Phe Gly Lys Glu Leu His Lys Val Glu
      85              90              95
Gly His Ile Gln Asp Lys Asn Lys Lys Lys Leu Phe Met Ile Tyr Gly
      100             105             110
Lys Trp Thr Glu Cys Leu Trp Gly Ile Asp Pro Val Ser Tyr Glu Ser
      115             120             125
Phe Lys Lys Gln Glu Arg Arg Gly Asp His Leu Arg Lys Ala Lys Leu
      130             135             140
Val Arg Ala Gly Ala Ser Pro Gly Arg Ala Glu Pro Trp Val Leu Arg

```

145 150 155 160
 Ala Ala Arg Pro Leu Leu Pro Leu Ala His Leu Leu Gly Ser Gln Gly
 165 170 175
 Thr Phe Gly Pro His Gln Glu Arg
 180

<210> 4018

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4018

Met Ser Thr Ser Leu Leu Ile Cys Lys Ser Arg Ser Cys Phe Leu Val
 1 5 10 15
 Tyr Leu Ala Cys Val Tyr Leu Tyr Gly Val Ala Arg Arg Asp His Arg
 20 25 30
 Asn Ala Cys Ser Leu Arg Gln Gly Phe Gln Thr Val Gly Pro Ser Pro
 35 40 45
 Phe Ser Lys Met Gly Asn Gln Leu Ala Ser Gly His Gln His Tyr Thr
 50 55 60
 Ala Met Lys Gln Asn Lys Val Gly Gln Asn Ala Ser Cys Ser Lys Gly
 65 70 75 80
 Lys Tyr Cys Phe Val Lys Leu Phe Thr His Thr Ser Lys Cys Glu Asn
 85 90 95
 Trp Leu Gln Cys Lys Thr Phe Leu Ala Gly Lys Leu
 100 105

<210> 4019

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4019

Met Ile Ser Lys Arg Phe Leu Ser Lys Ala Asp Leu Leu Leu Gln Asn
 1 5 10 15
 Gly Ala Ala Cys Thr Pro Gly His Ser Glu Ser Thr Pro Asn Lys Gly
 20 25 30
 Gly Glu Val Val Phe Ile Pro Asn Thr Ala Ser Ser Cys Phe Cys Val
 35 40 45
 Leu Ser Pro Leu Ala Arg Val Gln Ser Lys Leu Val Leu Ile Gly Tyr
 50 55 60
 Phe Lys Gln Glu Gly Cys Gly Leu Gln Gln Trp Glu Glu Gln Leu Pro
 65 70 75 80
 Arg Ala Arg Glu Thr Phe Pro Asp Lys Glu Gln Met Arg Val Thr Gly
 85 90 95
 Trp Asp Trp Trp Glu Lys Cys Leu Gln Asn Gly
 100 105

<210> 4020

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4020

Met Lys Glu Ile Val Asp Val Thr Arg Val Arg Asn Glu Gly Phe Gln
 1 5 10 15
 Asp Lys Asn Leu Gly Glu Ile Gln Gln Leu Ile Gly Thr Thr Thr Glu
 20 25 30
 Glu Leu Thr Glu Asp Asp Leu Thr Glu Met Ser Val Leu Lys Pro Met
 35 40 45
 Pro Asp Asn Glu Glu Lys Glu Ile Glu Ala Ala Val Pro Glu Asn Lys
 50 55 60
 Met Thr Leu Asp Asn Leu Ala Ala Glu Phe Pro Leu Phe Lys Thr Ser
 65 70 75 80
 Phe Asp Phe Phe Tyr Asp Met Asp Ser Ser Met Gly Thr Glu Thr Lys
 85 90 95
 Ala Asn Gly Glu Arg Arg Ile Gly Thr Ile
 100 105

<210> 4021

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4021

```

Met Gly Leu Arg Trp Ser Arg Arg Leu Trp Pro Val Val Val His Ser
 1             5             10             15
Trp Val Pro Ala Ser Gly Gly Thr His Cys Thr Tyr Gln Gly Ser Pro
      20             25             30
Ser His Leu Leu Thr Gln Ala Leu Gly Leu Thr Gly Pro Pro Pro Ala
      35             40             45
Ser Leu Ala Ala Phe Leu Ser Pro Trp Glu Ala Glu Pro Pro Ser Asp
      50             55             60
Pro Leu Ser Pro Glu Ser Thr Ile Ala Leu Phe Ser Leu Asn Val Leu
      65             70             75             80
Ile Phe Glu Met Ala Ala Ser Gly Pro Ser Glu Gly Arg Met Arg Glu
      85             90             95
Asn Val Gly Gln Thr Arg Leu Glu Val Pro Cys Cys Asn Glu Val Cys
      100            105            110
Ser Pro Thr
      115

```

<210> 4022

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4022

```

Met Leu Leu Asn Glu Lys Trp Leu Pro Tyr Pro Glu Val Pro Ser Pro
 1             5             10             15
Phe Leu Leu Gly Leu Thr Leu Ala His Gln Glu Leu Gly Cys Ser Pro
      20             25             30

```

Val	Asn	Arg	Thr	Ser	Met	Gln	Val	Trp	Asn	Leu	Ala	Asn	Cys	Lys	Leu
35				40				45							
Lys	Thr	Asn	His	Ile	Gly	His	Thr	Gly	Tyr	Leu	Asn	Thr	Val	Thr	Val
50				55				60							
Ser	Pro	Asp	Gly	Ser	Leu	Cys	Ala	Ser	Gly	Gly	Lys	Val	Phe	Gly	Asp
65				70				75				80			
Lys	Ala	Ser	Pro	Thr	Gln	Trp	Lys	Thr	Ala	Ser	Trp	Lys	Glu	His	Leu
				85				90				95			
Ala	Ser	Val	Ser	Asn	Val	Lys	Trp	Gln	Thr	Leu	Ala	Lys	Met	Val	Leu
100				105				110							
Gly	Gly														

<210> 4023

<211> 163

<212> PRT

⟨213⟩ Homo sapiens

<400> 4023

Met	Ser	Thr	Thr	Ser	Ile	Ser	Ser	Pro	Gln	Pro	Gly	Lys	Leu	Arg	Ser
1				5					10					15	
Pro	Phe	Leu	Gln	Lys	Gln	Leu	Thr	Gln	Pro	Glu	Thr	His	Phe	Gly	Arg
			20					25					30		
Glu	Pro	Ala	Ala	Ala	Ile	Ser	Arg	Pro	Arg	Ala	Asp	Leu	Pro	Ala	Glu
		35					40					45			
Glu	Pro	Ala	Pro	Ser	Thr	Pro	Pro	Cys	Leu	Val	Gln	Ala	Glu	Glu	Glu
	50					55					60				
Ala	Val	Tyr	Glu	Glu	Pro	Pro	Glu	Gln	Glu	Thr	Phe	Tyr	Glu	Gln	Pro
65					70					75					80
Pro	Leu	Val	Gln	Gln	Gln	Gly	Ala	Gly	Ser	Glu	His	Ile	Asp	His	His
			85					90						95	
Ile	Gln	Gly	Gln	Gly	Leu	Ser	Gly	Gln	Gly	Leu	Cys	Ala	Arg	Ala	Leu
		100						105					110		
Tyr	Asp	Tyr	Gln	Ala	Ala	Asp	Asp	Thr	Glu	Ile	Ser	Phe	Asp	Pro	Glu
	115						120					125			

Asn Leu Ile Thr Gly Ile Glu Val Ile Asp Glu Gly Trp Trp Arg Gly
 130 135 140
 Tyr Gly Pro Asp Gly His Phe Gly Met Phe Pro Ala Asn Tyr Val Glu
 145 150 155 160
 Leu Ile Glu

<210> 4024

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4024

Met Met Met Cys Val Met Ser Arg Leu Ser Val Pro Thr Asn Ser Tyr
 1 5 10 15
 Glu Met Glu Pro Leu Gly Gln Ser Ser Glu Leu Val Leu Leu Leu Phe
 20 25 30
 Leu Asp Lys Gly Leu Leu Leu Ile Leu Ser Ile Asp Arg Asn Gln
 35 40 45
 Glu Glu Asn Thr Phe Thr Arg Leu Ile Ile Thr Tyr Lys Val Leu Gln
 50 55 60
 Ala Val Leu Met Cys Ser Ser Glu Asp Ile Ser Gly Thr Ala Ala Met
 65 70 75 80
 Ile Glu Pro Thr Tyr Trp Leu Ser Leu Leu Lys Cys Ile Val Ile His
 85 90 95
 Leu Asn Leu Phe Val Trp Gly Phe Cys Trp Phe Cys Phe Leu Gln Gly
 100 105 110
 Ala Asp Arg
 115

<210> 4025

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4025

Met Ile Ser Ala His Cys Asn Leu Arg Leu Ser Gly Ser Ser Asp Ser
 1 5 10 15
 Pro Ala Ser Gly Ser Arg Val Ala Gly Ile Ala Asp Lys Tyr Ala Glu
 20 25 30
 Ala Cys Phe Gln Gly Gly Glu Arg Asp Ser Phe Ser Ser Ala Gly His
 35 40 45
 Arg Ala Asn Leu Lys Cys Ser Thr Val Val Thr Trp Arg Asp Leu Leu
 50 55 60
 Ser Ser His Ser Arg Gly Pro Phe Trp Gly Gln Gly Asp Phe Ser Val
 65 70 75 80
 Arg Pro Val Asp Leu Ile Glu Met Met Ser Cys His Ile Ala Gln Ala
 85 90 95
 Gly Leu Lys Leu Gln Ala
 100

<210> 4026

<211> 124

<212> PRT

<213> Homo sapiens

<400> 4026

Met Gln Ala Thr Cys Leu His Val Arg Gly Ser Leu Glu Ser Ser His
 1 5 10 15
 Arg Ala Thr Pro Trp Leu Gly Ser Ser Pro Ala Leu Leu Pro Pro Ser
 20 25 30
 Pro Ser Pro Ala Ala Ala Leu Ser Met Ala Glu Pro Leu Leu Pro Leu
 35 40 45
 Leu Glu Gly Arg Ser Thr Glu Gln Ile Gln Glu Arg Asn His Cys Val
 50 55 60
 Phe His Arg Arg Glu Ser Thr Leu Asp Phe Leu Cys Asn Leu Leu Leu
 65 70 75 80
 His Phe His Arg Asp Ser Tyr Leu Cys Ser Val Thr Gln Leu Lys Pro
 85 90 95

Ser Lys Ile Arg Leu Pro Cys Leu His Lys Gly His His Asp Gly Asn
 100 105 110
 Gly Cys Thr Ser Pro Cys Val Trp Thr Glu Ala Asp
 115 120

<210> 4027

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4027

Met Ile Ile Ile Val Arg Ile Ala Ile Ile Lys Lys Ser Arg Asn Asn
 1 5 10 15
 Ser Cys Trp Cys Gly Cys Arg Lys Lys Arg Met His Val Tyr Cys Ser
 20 25 30
 Trp Glu Gln Leu Val Gln Pro Leu Trp Lys Ala Val Trp Arg Phe Leu
 35 40 45
 Lys Lys Leu Lys Ile Glu Leu Pro Phe Asn Pro Ala Ile Pro Leu Leu
 50 55 60
 Gly Val Tyr Pro Lys Glu Asp Lys Ser Phe Tyr Glu Asn Ala Cys Ser
 65 70 75 80
 Cys Val Phe Ile Ala Ala Leu Phe Thr Ile Ala Lys Ser Trp Ile Gln
 85 90 95
 Pro Lys Cys Leu Ser Ala Val Val Trp Ile Lys Arg Met Trp Cys Ile
 100 105 110
 His Thr Glu Ile Leu Cys Ser His Lys Asn Met Lys Leu Leu Ser Phe
 115 120 125
 Ala Ala Thr Trp Met Lys Pro Glu Gly His Tyr Pro Lys
 130 135 140

<210> 4028

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4028

Met Arg Tyr Gly Pro Gly Lys Glu Ala Ser Pro Arg Pro Leu Gln Ala
 1 5 10 15
 Pro Arg Lys Val Ser Ile Glu Gly Arg Glu Leu Gly Lys Leu Ser Gln
 20 25 30
 Gln Gly Trp Lys Glu Val Gly Asn Pro Phe Ser Gly Ser Leu Pro Val
 35 40 45
 Lys Leu Leu Ser Ser Gly Arg Ser Cys Pro Arg Tyr Arg Met Val Ser
 50 55 60
 Ser Val Cys Gln Ser Ser Thr Gln Asn Leu Gly Pro Cys Gln Ser Cys
 65 70 75 80
 Thr Lys Asp His Thr Val Leu Ser Ser Tyr Ser Val Val Val Phe Val
 85 90 95
 Thr Ile His Tyr Leu Ile Ile Phe Lys Tyr Thr Ser Cys Phe Ile Asp
 100 105 110
 Phe

<210> 4029

<211> 360

<212> PRT

<213> Homo sapiens

<400> 4029

Met Gln Ile Ile Arg His Ser Glu Gln Thr Leu Lys Thr Ala Leu Ile
 1 5 10 15
 Ser Lys Asn Pro Val Leu Val Ser Gln Tyr Glu Lys Leu Asp Ala Gly
 20 25 30
 Glu Gln Arg Leu Met Asn Glu Ala Phe Gln Pro Ala Ser Asp Leu Phe
 35 40 45
 Gly Pro Ile Thr Leu His Ser Pro Ser Asp Trp Ile Thr Ser His Pro
 50 55 60
 Glu Ala Pro Gln Asp Phe Glu Gln Phe Phe Ser Asp Pro Tyr Arg Lys

65	70	75	80
Thr Pro Ser Pro Asn Lys Arg Ser Ile Tyr Ile Gln Ser Ile Gly Ser			
	85	90	95
Leu Gly Asn Thr Arg Ile Ile Ser Glu Glu Tyr Ile Lys Trp Leu Thr			
	100	105	110
Gly Tyr Cys Lys Ala Tyr Phe Tyr Gly Leu Arg Val Lys Leu Leu Glu			
	115	120	125
Pro Val Pro Val Ser Val Thr Arg Cys Ser Phe Arg Val Asn Glu Asn			
	130	135	140
Thr His Asn Leu Gln Ile His Ala Gly Asp Ile Leu Lys Phe Leu Lys			
145	150	155	160
Lys Lys Lys Pro Glu Asp Ala Phe Cys Val Val Gly Ile Thr Met Ile			
	165	170	175
Asp Leu Tyr Pro Arg Asp Ser Trp Asn Phe Val Phe Gly Gln Ala Ser			
	180	185	190
Leu Thr Asp Gly Val Gly Ile Phe Ser Phe Ala Arg Tyr Gly Ser Asp			
	195	200	205
Phe Tyr Ser Met His Tyr Lys Gly Lys Val Lys Lys Leu Lys Lys Thr			
	210	215	220
Ser Ser Ser Asp Tyr Ser Ile Phe Asp Asn Tyr Tyr Ile Pro Glu Ile			
225	230	235	240
Thr Ser Val Leu Leu Leu Arg Ser Cys Lys Thr Leu Thr His Glu Ile			
	245	250	255
Gly His Ile Phe Gly Leu Arg His Cys Gln Trp Leu Ala Cys Leu Met			
	260	265	270
Gln Gly Ser Asn His Leu Glu Glu Ala Asp Arg Arg Pro Leu Asn Leu			
	275	280	285
Cys Pro Ile Cys Leu His Lys Leu Gln Cys Ala Val Gly Phe Ser Ile			
	290	295	300
Val Glu Arg Tyr Lys Ala Leu Val Arg Trp Ile Asp Asp Glu Ser Ser			
305	310	315	320
Asp Thr Pro Gly Ala Thr Pro Glu His Ser His Glu Asp Asn Gly Asn			
	325	330	335
Leu Pro Lys Pro Val Glu Ala Phe Lys Glu Trp Lys Glu Trp Ile Ile			
	340	345	350

Lys Cys Leu Ala Val Leu Gln Lys
 355 360

<210> 4030

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4030

Met Leu Gly Thr Asp Arg Cys Val Val Glu Glu Trp Leu Ser Glu Phe
 1 5 10 15
 Lys Ala Leu Pro Asp Thr Gln Ile Thr Ser Tyr Ala Ala Thr Leu His
 20 25 30
 Arg Lys Lys Thr Leu Val Pro Ala Leu Tyr Lys Val Ile Gln Asp Ser
 35 40 45
 Asn Asn Glu Leu Leu Glu Pro Val Cys His Gln Leu Phe Glu Leu Tyr
 50 55 60
 Arg Ser Ser Glu Val Arg Leu Lys Arg Phe Thr Leu Gln Phe Leu Pro
 65 70 75 80
 Glu Leu Met Trp Val Tyr Leu Arg Leu Thr Val Ser Arg Asp Arg Gln
 85 90 95
 Ser Asn Gly Cys Ile Glu Ala Leu Leu Leu Gly Ile Tyr Asn Leu Glu
 100 105 110
 Ile Ala Asp Lys Asp Gly Asn Asn Lys Val Leu Ser Phe Thr Ile Pro
 115 120 125
 Ser Leu Ser Lys Pro Ser Ile Tyr His Glu Pro Ser Thr Ile Gly Ser
 130 135 140
 Met Ala Leu Thr Glu Gly Ala Leu Cys Gln His Asp Leu Ile Arg Val
 145 150 155 160
 Val Tyr Ser Asp Leu His Pro Gln Arg Glu Thr Phe Thr Ala Gln Asn
 165 170 175
 Arg Phe Glu Val Leu Ser Phe Leu Met Leu Cys Tyr Asn Ser Ala Ile
 180 185 190
 Val Tyr Met Pro Ala Ser Ser Tyr Gln Ser Leu Cys Arg Met Gly Ser
 195 200 205

Arg

<210> 4031

<211> 139

<212> PRT

<213> Homo sapiens

<400> 4031

```

Met Leu Glu Pro Ser Ala Lys Cys Pro Arg Gln Glu Gly Lys Tyr Pro
  1              5              10              15
His Arg Gly Arg Pro Gly Asp Pro Asp Phe Arg Ala Ala Gly Glu Glu
      20              25              30
Gly Arg Gly Arg Trp Gly Ala Leu Gln Phe Arg Ser Thr Gly Asn Pro
      35              40              45
Glu Lys Ser Ser Pro Leu Arg Gly Leu Pro Ser Pro Ala Pro Ser Leu
      50              55              60
Pro His Arg Ala Leu Gly Ala Ala Ala Gly Arg Gly Asp Arg Arg Gly
      65              70              75              80
Arg Glu Asp Arg Glu Ala Lys Glu Leu Gly Trp Gly Val Arg Val Trp
      85              90              95
Trp Arg Gly Trp Asp Asp Thr Gly Val Leu Arg Gly Gly Ala Gly Arg
      100             105             110
Lys Ala Arg Arg Pro Gly Gln Val Gly Val Arg Arg Ser Gly Arg Gln
      115             120             125
Glu Arg Gly Cys Gly Arg Gly Arg Leu Gly Phe
      130             135

```

<210> 4032

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4032

Met Arg Pro Leu Ala Ser Leu Ser Gly Gly Gln Lys Ser Arg Val Ala
 1 5 10 15
 Phe Ala Gln Met Thr Met Pro Cys Pro Asn Phe Tyr Ile Leu Asp Glu
 20 25 30
 Pro Thr Asn His Leu Asp Met Glu Thr Ile Glu Ala Leu Gly Arg Ala
 35 40 45
 Leu Asn Asn Phe Arg Gly Gly Val Ile Leu Val Ser His Asp Glu Arg
 50 55 60
 Phe Ile Arg Leu Val Cys Arg Glu Leu Trp Val Cys Glu Gly Gly Gly
 65 70 75 80
 Val Thr Arg Val Glu Gly Gly Phe Asp Gln Tyr Arg Ala Leu Leu Gln
 85 90 95
 Glu Gln Phe Arg Arg Glu Gly Phe Leu
 100 105

<210> 4033

<211> 111

<212> PRT

<213> Homo sapiens

<400> 4033

Met Ala Tyr Gly Phe Arg Asn Ile Gln Asn Leu Val Gln Arg Leu Lys
 1 5 10 15
 Arg Gly Arg Cys Pro Tyr His Tyr Val Glu Val Met Ala Cys Pro Ser
 20 25 30
 Gly Cys Leu Asn Gly Gly Gly Gln Leu Gln Ala Pro Asp Arg Pro Ser
 35 40 45
 Arg Glu Leu Leu Gln His Val Glu Arg Leu Tyr Gly Met Val Arg Ala
 50 55 60
 Glu Ala Pro Glu Asp Ala Pro Gly Val Gln Glu Leu Tyr Thr His Trp
 65 70 75 80
 Leu Gln Gly Thr Asp Ser Glu Cys Ala Gly Arg Leu Leu His Thr Gln
 85 90 95
 Tyr His Ala Val Glu Lys Ala Ser Thr Gly Leu Gly Ile Arg Trp
 100 105 110

<210> 4034

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4034

```

Met Pro Leu Gly Ser Gly His Arg Trp Leu His Ser Pro Leu Ala Pro
  1              5              10              15
Cys Arg Cys Pro Cys Thr Leu Pro Pro Ser Arg Pro Thr Arg Asp Ala
      20              25              30
Ala Leu Pro Trp Pro Ala Ala Val Leu Cys Cys Gly Phe Leu Ala Val
      35              40              45
Ala Gly Thr Gly Pro Pro Pro Pro Val Pro Ser Gly His Arg Leu Gln
      50              55              60
Gln Arg Leu Gly Cys Arg Glu Gly Tyr Gln Ser Trp Glu Asn Trp Pro
      65              70              75              80
Pro Cys Arg Phe Thr Glu Gln Gly Gly Ser His Arg Glu Val Ser Gly
      85              90              95
Phe Phe Leu Arg
      100

```

<210> 4035

<211> 282

<212> PRT

<213> Homo sapiens

<400> 4035

```

Met Ala Leu Ser Cys Ser Ser Trp Cys Arg Ser Pro Gln Trp Lys Phe
  1              5              10              15
Glu Ala Ser Lys Ser His Ala Asn His Arg Pro Ile Cys Leu Ser Pro
      20              25              30
Arg Ile Trp Pro Gly Ser Ala Ser Ala Thr Ser Thr Val Cys Ser Ser

```

35	40	45
Ser Glu Ser Phe Leu Pro Arg Gly Pro Pro Ala Val Ser Leu Leu Leu		
50	55	60
His Gly Pro Pro Thr Val Ser Phe Pro Pro Pro Trp Pro Thr His His		
65	70	75
Val Leu Pro Ser Pro Val Ala His Pro Pro Cys Pro Cys Leu Pro Pro		
85	90	95
Asp Met Pro Leu Glu Leu Pro Gly Pro Cys Cys Cys Pro His Cys Leu		
100	105	110
Cys Asp Ser Ala Pro Pro Ser Leu Pro Cys Pro Thr Leu Val Gln Gly		
115	120	125
Ala Ser Arg Pro Ile Leu Ile Leu Arg Ala Phe Pro Gly Pro Cys His		
130	135	140
Ser Val Pro Cys His Asp Leu Lys Leu Gln Val Gly Ala Ser Pro Phe		
145	150	155
Arg His Gly Cys Pro Pro Ser Val Arg Cys Pro Ser Arg Leu Ile Ala		
165	170	175
Gly Val Pro Gly Cys Ser Val Leu Ser Trp Ser Leu Gly His Ser Leu		
180	185	190
Ser Gly Ile Asp Ser Arg Val Gly Ala Thr Pro Gly Leu Gly His Ser		
195	200	205
Leu Ser Trp Val Arg Ala Pro Pro Gly Leu Gly His Ser Leu Ser Gly		
210	215	220
Val Gly Ala Thr Pro Gly Leu Gly His Leu Leu Ser Gly Val Gly Ala		
225	230	235
Ser Pro Gly Glu Asp Thr Glu His Ala Ala Ala Leu Thr Pro Cys Gly		
245	250	255
Val Pro Pro Val Pro Gly Cys Arg Ser His Ser Gln Pro Leu Ser His		
260	265	270
Leu Val Ser Ser Ser Arg Cys Cys Gly Pro		
275	280	

<210> 4036

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4036

Met Asn Lys Val Asn Leu Leu Val Ile Phe Lys Leu Leu Val Leu Gly
 1 5 10 15
 Val Cys Asn Lys Val Lys Val Tyr Ile Leu Val Leu Pro Lys Ser His
 20 25 30
 Leu Lys Tyr Leu Gln Ile Phe Asn Leu Cys Val Val Tyr Pro Ile Ile
 35 40 45
 Ala Pro Ile Ser Gly Lys Ser Val Phe Leu Lys Phe Lys Lys Glu Glu
 50 55 60
 Lys Gln Gln Ser Asp Tyr Phe Ala Val Glu Lys Lys Ser Val Ser Phe
 65 70 75 80
 Met Gly Tyr Thr Phe Ile Phe Leu Cys Ser Val Lys Leu Ala Thr Leu
 85 90 95
 Trp Gly Thr Trp Val Leu Phe Leu Leu Val His Asp Val Cys Phe Arg
 100 105 110
 Thr Tyr Leu Leu Thr Phe Gln Arg Thr Ser Tyr Ile Thr Cys Leu Thr
 115 120 125
 Tyr

<210> 4037

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4037

Met Gly Asn Leu Cys Ser Trp Thr Leu Lys Ile Leu Glu Ser Leu His
 1 5 10 15
 Ile Arg Asn Val Lys Met Ala Trp Pro Ser Lys Gly Phe Ser Asn Ser
 20 25 30
 Ser Cys Leu Gln Ala Val Pro Gln Thr Glu His Tyr Asn Leu Arg Ser
 35 40 45
 Phe Leu Leu Ala Tyr Asn Ser Asp Ser Gly Ser Pro Lys Gln Ser Ile

50 55 60
 Trp Leu Ala Ile Ala Arg Leu Val Asn Gly Ile Phe Tyr Leu Leu Lys
 65 70 75 80
 Thr Ala Lys Tyr Cys Thr Arg Gly Arg Ser Trp Ala Ala Gly Arg Glu
 85 90 95
 Gln Gln Met Glu Arg Ser Leu Leu Ile Val Leu Ile Ser Trp Lys Thr
 100 105 110
 Thr Val Arg Arg Cys
 115

<210> 4038

<211> 172

<212> PRT

<213> Homo sapiens

<400> 4038

Met Pro Gln Ile Pro Arg Asp Asn Lys Ala Ala Ala Leu Leu Met Leu
 1 5 10 15
 Thr Lys Asn Val Asp Phe Val Lys Asp Ala His Glu Glu Met Glu Gln
 20 25 30
 Ala Val Glu Glu Cys Asp Pro Tyr Ser Gly Leu Leu Asn Asp Thr Glu
 35 40 45
 Glu Asn Asn Ser Asp Asn His Asn His Glu Asp Asp Val Leu Gly Phe
 50 55 60
 Pro Ser Asn Gln Asp Leu Tyr Trp Ser Glu Asp Asp Gln Glu Leu Ile
 65 70 75 80
 Ile Pro Cys Leu Ala Leu Val Arg Ala Ser Lys Ala Cys Leu Lys Lys
 85 90 95
 Ile Arg Met Leu Val Ala Glu Asn Gly Lys Lys Asp Gln Val Ala Gln
 100 105 110
 Leu Asp Asp Ile Val Asp Ile Ser Asp Glu Ile Ser Pro Ser Val Asp
 115 120 125
 Asp Leu Ala Leu Ser Ile Tyr Pro Pro Met Cys His Leu Thr Val Arg
 130 135 140
 Ile Asn Val Ser Thr Gly Phe Glu Gly Ile Ala Thr Glu Gln Met Gly

145 150 155 160
 Arg Ile Ser Leu Ile Thr Ser Ile Ser Cys Lys Leu
 165 170

<210> 4039

<211> 164

<212> PRT

<213> Homo sapiens

<400> 4039

Met Met Lys Ile Pro Lys Gly Met Ala Thr Lys Ala Lys Ile Asp Lys
 1 5 10 15

 Trp Asp Leu Ile Lys Leu Lys Ser Phe Cys Thr Ala Lys Glu Thr Thr
 20 25 30
 Ile Arg Val Asn Arg Gln Pro Thr Lys Trp Glu Lys Asn Phe Glu Ile
 35 40 45
 Tyr Leu Ser Asp Lys Gly Leu Ile Ser Arg Ile Tyr Lys Glu Leu Lys
 50 55 60
 Gln Ile Tyr Lys Lys Lys Thr Asn Asn Ser Ile Arg Asn Trp Ala Lys
 65 70 75 80
 Asp Met Asn Arg His Ile Ser Lys Glu Asp Ile Tyr Ala Ala Thr Lys
 85 90 95
 His Met Arg Lys Ser Ser Thr Ser Leu Val Ile Arg Glu Met Gln Ile
 100 105 110
 Lys Thr Thr Met Arg His His Leu Thr Ser Val Lys Met Ala Ile Ile
 115 120 125
 Lys Lys Ser Gly Asn Asn Arg Phe Trp Arg Glu Cys Gly Glu Ile Glu
 130 135 140
 Met Val Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp
 145 150 155 160
 Lys Thr Val Trp

<210> 4040

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4040

```

Met Pro Gln Pro Pro Ser Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Leu
 1             5             10             15
Thr Asn Ser Asn Phe Cys Ile Phe Ser Arg Asp Arg Phe His His Val
          20             25             30

Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro Pro Thr Leu
      35             40             45
Ala Ser Gln Ser Ala Gly Ile Thr Ser Val Ser His Cys Thr Pro Pro
      50             55             60
Thr Ile Ile Phe Ser Leu Ile Ser Phe Asn Ser Phe Cys Leu Tyr Asp
 65             70             75             80
Leu Leu Phe Ser Phe Leu Ser Ser Ile Leu Val Asn Ile Phe Phe Ile
          85             90             95
Val Ser Thr Phe Ile Cys Pro Leu Phe Ser Phe Ile Phe Thr Ser Val
          100             105             110
Met Val Ile Leu Pro Val Phe Trp Arg Trp Cys Leu Asn Met Phe Pro
          115             120             125
Arg Leu Asp Leu Asn Ala
      130

```

<210> 4041

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4041

```

Met Asp Leu Asn Tyr Thr Leu Lys Gln Met Asp Leu Thr Asp Ile Tyr
 1             5             10             15
Arg Thr Phe His Pro Thr Thr Ala Glu Tyr Thr Leu Tyr Ser Thr Val

```

20 25 30
 His Gly Thr Phe Ser Lys Ile Asp His Met Ile Gly His Lys Met Ser
 35 40 45
 Phe Asn Lys Phe Lys Lys Thr Glu Ile Ile Ser Ser Thr Leu Ser Asp
 50 55 60
 His Ser Glu Ile Lys Leu Glu Ile Asn Ser Arg Arg Asn Leu Gln Asn
 65 70 75 80
 His Ala Asn Thr Arg Lys Leu Asn Asn Leu Leu Leu Asn Glu His Trp
 85 90 95
 Val Lys Asn Glu Ile Lys Met Glu Ile
 100 105

<210> 4042

<211> 506

<212> PRT

<213> Homo sapiens

<400> 4042

Met Ile Met Ala Ser Phe Phe Leu Leu Arg Arg Lys Lys Ser Lys Ser
 1 5 10 15
 Arg Ser Arg Ser His Glu Arg Lys Arg Ser Lys Ser Lys Glu Arg Lys
 20 25 30
 Arg Ser Arg Asp Arg Glu Arg Lys Lys Ser Lys Ser Arg Glu Arg Lys
 35 40 45
 Arg Ser Arg Ser Lys Glu Arg Arg Arg Ser Arg Ser Arg Ser Arg Asp
 50 55 60
 Arg Arg Phe Arg Gly Arg Tyr Arg Ser Pro Tyr Ser Gly Pro Lys Phe
 65 70 75 80
 Asn Ser Ala Ile Arg Gly Lys Ile Gly Leu Pro His Ser Ile Lys Leu
 85 90 95
 Ser Arg Arg Arg Ser Arg Ser Lys Ser Pro Phe Arg Lys Asp Lys Ser
 100 105 110
 Pro Val Arg Glu Pro Ile Asp Asn Leu Thr Pro Glu Glu Arg Asp Ala
 115 120 125
 Arg Thr Val Phe Cys Met Gln Leu Ala Ala Arg Ile Arg Pro Arg Asp

130	135	140	
Leu Glu Glu Phe Phe Ser Thr Val Gly Lys Val Arg Asp Val Arg Met			
145	150	155	160
Ile Ser Asp Arg Asn Ser Arg Arg Ser Lys Gly Ile Ala Tyr Val Glu			
	165	170	175
Phe Val Asp Val Ser Ser Val Pro Leu Ala Ile Gly Leu Thr Gly Gln			
	180	185	190
Arg Val Leu Gly Val Pro Ile Ile Val Gln Ala Ser Gln Ala Glu Lys			
	195	200	205
Asn Arg Ala Ala Ala Met Ala Asn Asn Leu Gln Lys Gly Ser Ala Gly			
	210	215	220
Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe Asn Ile Thr Glu Asp			
225	230	235	240
Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Arg Ile Glu Ser Ile Gln			
	245	250	255
Leu Met Met Asp Ser Glu Thr Gly Arg Ser Lys Gly Tyr Gly Phe Ile			
	260	265	270
Thr Phe Ser Asp Ser Glu Cys Ala Lys Lys Ala Leu Glu Gln Leu Asn			
	275	280	285
Gly Phe Glu Leu Ala Gly Arg Pro Met Lys Val Gly His Val Thr Glu			
	290	295	300
Arg Thr Asp Ala Ser Ser Ala Ser Ser Phe Leu Asp Ser Asp Glu Leu			
305	310	315	320
Glu Arg Thr Gly Ile Asp Leu Gly Thr Thr Gly Arg Leu Gln Leu Met			
	325	330	335
Ala Arg Leu Ala Glu Gly Thr Gly Leu Gln Ile Pro Pro Ala Ala Gln			
	340	345	350
Gln Ala Leu Gln Met Ser Gly Ser Leu Ala Phe Gly Ala Val Ala Glu			
	355	360	365
Phe Ser Phe Val Ile Asp Leu Gln Thr Arg Leu Ser Gln Gln Thr Glu			
	370	375	380
Ala Ser Ala Leu Ala Ala Ala Ala Ser Val Gln Pro Leu Ala Thr Gln			
385	390	395	400
Cys Phe Gln Leu Ser Asn Met Phe Asn Pro Gln Thr Glu Glu Glu Val			
	405	410	415
Gly Trp Asp Thr Glu Ile Lys Asp Asp Val Ile Glu Glu Cys Asn Lys			

420 425 430
 His Gly Gly Val Ile His Ile Tyr Val Asp Lys Asn Ser Ala Gln Gly
 435 440 445
 Asn Val Tyr Val Lys Cys Pro Ser Ile Ala Ala Ala Ile Ala Ala Val
 450 455 460
 Asn Ala Leu His Gly Arg Trp Phe Ala Gly Lys Met Ile Thr Ala Ala
 465 470 475 480
 Tyr Val Pro Leu Pro Thr Tyr His Asn Leu Phe Pro Asp Ser Met Thr
 485 490 495
 Ala Thr Gln Leu Leu Val Pro Ser Arg Arg
 500 505

<210> 4043

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4043

Met Trp Phe Leu Arg Arg Lys His Ala Gly Thr Ala Ile Pro Ser Arg
 1 5 10 15
 Leu Glu Glu His Thr Asp Ala Gly Val Ser Glu Pro Asp Leu Gly Ser
 20 25 30
 Ser Leu Thr Ser Ala Ala His His Arg Gln Ala Cys Lys Ser Tyr Phe
 35 40 45
 Ser Ser Leu Ser Leu His Phe Phe His Ile Glu Trp Gly Ser Val Leu
 50 55 60
 Pro Ala Met Arg Val Val Val Asn Ile Gln Arg Lys Leu Ser Arg Ser
 65 70 75 80
 Thr Ile Thr Leu Glu Asn Cys Leu Ala Val Leu Thr Asp Ala Glu His
 85 90 95
 Val Gly Thr Ser Gly Pro Ser Ser Pro Thr Ala Gly Asp Thr Leu Ser
 100 105 110
 Arg Tyr Val Pro Thr Cys Thr Arg Lys Tyr Leu
 115 120

<210> 4044

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4044

```

Met Asp Ser Ser Ser Ser Gly Val Ser Asp Trp Arg Asp Ala Ser Gly
  1              5              10              15
Arg Gly Ser Phe Pro Gly Ala Pro Ala Phe Val Met Val Asp Ala Pro
          20              25              30
Leu Arg Cys His Leu Leu Arg Arg Thr Ser Cys Ser Val Leu Asp Arg
      35              40              45
Trp Ala Pro Val Gly Pro Pro Arg Leu Glu Met Asn Leu Lys Gly Thr
      50              55              60
Pro Cys Leu Gly Asp Leu Ser Gln Ala Gly Gln Arg Asn Asn Gln Thr
      65              70              75              80
Thr Val Ser Ala Trp Arg Leu Gln Ser Phe Ala Gln Gly Pro Ser Glu
          85              90              95
Gly Gly Leu Gly Lys Thr Ser Trp Gly Leu Gly Gln Leu Ser Lys Met
      100              105              110
Asp Lys Glu Ser Asn His Leu Cys Leu His Ile Phe Phe Ile Ser Ser
      115              120              125
Ser Gln Gln Pro
      130

```

<210> 4045

<211> 506

<212> PRT

<213> Homo sapiens

<400> 4045

```

Met Pro Ser Ala Leu Ala Ile Phe Thr Cys Arg Pro Asn Ser His Pro
  1              5              10              15
Phe Gln Glu Arg His Val Tyr Leu Asp Glu Pro Ile Lys Ile Gly Arg

```

20	25	30
Ser Val Ala Arg Cys Arg Pro Ala Gln Asn Asn Ala Thr Phe Asp Cys		
35	40	45
Lys Val Leu Ser Arg Asn His Ala Leu Val Trp Phe Asp His Lys Thr		
50	55	60
Gly Lys Phe Tyr Leu Gln Asp Thr Lys Ser Ser Asn Gly Thr Phe Ile		
65	70	75
80		
Asn Ser Gln Arg Leu Ser Arg Gly Ser Glu Glu Ser Pro Pro Cys Glu		
85	90	95
Ile Leu Ser Gly Asp Ile Ile Gln Phe Gly Val Asp Val Thr Glu Asn		
100	105	110
Thr Arg Lys Val Thr His Gly Cys Ile Val Ser Thr Ile Lys Leu Phe		
115	120	125
Leu Pro Asp Gly Met Glu Ala Arg Leu Arg Ser Asp Val Ile His Ala		
130	135	140
Pro Leu Pro Ser Pro Val Asp Lys Val Ala Ala Asn Thr Pro Ser Met		
145	150	155
160		
Tyr Ser Gln Glu Leu Phe Gln Leu Ser Gln Tyr Leu Gln Glu Ala Leu		
165	170	175
His Arg Glu Gln Met Leu Glu Gln Lys Leu Ala Thr Leu Gln Arg Leu		
180	185	190
Leu Ala Ile Thr Gln Glu Ala Ser Asp Thr Ser Trp Gln Ala Leu Ile		
195	200	205
Asp Glu Asp Arg Leu Leu Ser Arg Leu Glu Val Met Gly Asn Gln Leu		
210	215	220
Gln Ala Cys Ser Lys Asn Gln Thr Glu Asp Ser Leu Arg Lys Glu Leu		
225	230	235
240		
Ile Ala Leu Gln Glu Asp Lys His Asn Tyr Glu Thr Thr Ala Lys Glu		
245	250	255
Ser Leu Arg Arg Val Leu Gln Glu Lys Ile Glu Val Val Arg Lys Leu		
260	265	270
Ser Glu Val Glu Arg Ser Leu Ser Asn Thr Glu Asp Glu Cys Thr His		
275	280	285
Leu Lys Glu Met Asn Glu Arg Thr Gln Glu Glu Leu Arg Glu Leu Ala		
290	295	300
Asn Lys Tyr Asn Gly Ala Val Asn Glu Ile Lys Asp Leu Ser Asp Lys		

305 310 315 320
 Leu Lys Val Ala Glu Gly Lys Gln Glu Glu Ile Gln Gln Lys Gly Gln
 325 330 335
 Ala Glu Lys Lys Glu Leu Gln His Lys Ile Asp Glu Met Glu Glu Lys
 340 345 350
 Glu Gln Glu Leu Gln Ala Lys Ile Glu Ala Leu Gln Ala Asp Asn Asp
 355 360 365
 Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Val Arg Leu Glu His Leu
 370 375 380
 Gln Glu Lys Thr Leu Lys Glu Cys Ser Ser Leu Gly Ile Gln Val Asp
 385 390 395 400
 Asp Phe Leu Pro Lys Ile Asn Gly Ser Thr Glu Lys Glu Lys Leu Ile
 405 410 415
 Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu Ser Lys
 420 425 430
 Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr Leu Ser
 435 440 445
 Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln Met Asp
 450 455 460
 Glu Gln Asp Leu Asn Glu Pro Leu Ala Lys Val Ser Leu Leu Lys Gly
 465 470 475 480
 Thr Leu Thr Cys Phe Tyr Asp Ile Val Asn Gln Gly Ile Lys Ser Pro
 485 490 495
 Phe Ala Ile Lys Ser Val Leu Asp Ile Met
 500 505

<210> 4046

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4046

Met Pro Pro Thr Ser Gln Leu Pro Thr Leu Asp Thr Ala Leu Gln Thr

1

5

10

15

Arg His Pro Trp Ala Leu Ser Ile Thr Arg Gly Ala Thr Val Ser Arg
 20 25 30
 Ala Pro Leu Gln Gly Arg Val Thr Ala Ile Val Pro Lys Ala Ser Cys
 35 40 45
 Leu His Gly Thr Pro Arg Cys Phe Leu Gln Arg Gly Val Pro Ser Trp
 50 55 60
 Ser Ser Pro Gln Thr Trp Ser Trp Pro Ala Pro Ser Gln Pro Phe Gln
 65 70 75 80
 Gln Gly Pro Arg Leu Met Thr Ala Pro Ala Pro His Pro Gly Ser Gly
 85 90 95
 Thr Arg Thr Ser Ser His His Pro Ser Pro Leu Arg Arg Ser Ser Leu
 100 105 110
 Ala Val Gln Val Pro Ile Ser Gly Glu Gly Met Trp Glu Gly Asp Arg
 115 120 125
 Glu Gly Leu Gly Ser Lys
 130

<210> 4047

<211> 203

<212> PRT

<213> Homo sapiens

<400> 4047

Met Ile Ile Leu Ile Val Asn Ile Gly Ile Leu Asn Val Lys Cys Gln
 1 5 10 15
 Thr Asn Val Thr Tyr Ala Gly Ala Leu Ala Leu Leu Ile Arg Phe Trp
 20 25 30
 Phe Lys Phe Cys His Ser Ser Ser Trp Val Arg Gly Phe Ala Val Ser
 35 40 45
 Phe Phe Phe Trp Thr Leu Asp Pro Glu Pro Val Leu Ala Ser Gln Phe
 50 55 60
 Leu Ser Leu Tyr Pro Phe Pro Ser Val Ser Ser Ser Leu Phe Pro Leu
 65 70 75 80
 Ser Leu Phe Val Phe Leu Ile Ser Phe Cys Phe Ser Glu Tyr Leu His
 85 90 95

Phe Tyr Leu Cys Val Ser Val Tyr Phe Ser Val Tyr Leu Ser Val Leu
 100 105 110
 Gln Ser Val Phe Leu Phe Leu Ala Leu Arg Gln Cys Leu Phe Leu Ser
 115 120 125
 Ser Leu Ser Cys Ser Ala Met Ala Ile Ser Thr Ala Leu Phe Leu Thr
 130 135 140
 Leu Ile Phe Gly Leu Cys Val Ser Pro Ser His Phe Leu Ser His Ser
 145 150 155 160
 Val Ser Val Ser Ile Ser Val Ser Pro Leu Leu Cys Pro Gln Ser Leu
 165 170 175
 Cys Leu Pro Glu Ala Leu Phe Leu Ser Leu Leu Cys Cys Val Leu Asn
 180 185 190
 Leu Ser Val Ser Leu Arg Leu Tyr Phe Cys Leu
 195 200

<210> 4048

<211> 145

<212> PRT

<213> Homo sapiens

<400> 4048

Met Leu Cys Cys Leu Asp Ile Ser Ser Thr Arg Tyr Pro Lys Ser Ser
 1 5 10 15
 Leu Ser Ser Ser Lys Phe His Arg Ser Leu Gly Gln Gly Gln Met Leu
 20 25 30
 Pro Val Cys Leu His Ser Lys Ser Asp Leu Tyr Ser Ser Ser Gln Lys
 35 40 45
 Val Pro His Leu His Leu Arg Leu His Gln Pro Arg Leu His Cys Thr
 50 55 60
 Tyr Tyr Tyr Gln Tyr Phe Gly Gln Gly His Ser Thr Ser Leu Tyr Glu
 65 70 75 80
 Val Pro Asn Phe Pro Thr Ser Pro Cys Leu Leu Leu Ser Pro Pro Asn
 85 90 95
 Cys Ser Asn Leu Cys Leu Leu Pro Ser Ser Lys Val Ala Ser Thr Tyr
 100 105 110

Leu Gly Ile Phe Thr Ala Ala Pro His Ser Trp Tyr Gln Phe Thr Val
 115 120 125
 Leu Ile Cys Ser Arg Ala Ala Ile Arg Thr Asp Ser Gly Leu Gly Asn
 130 135 140
 Leu
 145

<210> 4049

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4049

Met Ala Thr Gly Val Cys Ser Asp Phe Ser Cys Val Glu Pro Ser Gly
 1 5 10 15
 Cys Ala Ala Trp Ala Gly Gly Met Leu Leu Ala Gly Gln Asp Val His
 20 25 30
 Gln Ala Gly Cys Gly Cys Thr Gly Leu Lys Gly Cys Phe Gly Arg Pro
 35 40 45
 Trp Cys Cys Arg Ala Ala Gly Arg Arg Val Leu Ala Arg Ser Gln Leu
 50 55 60
 Ser Leu Arg Phe Leu Leu Pro Leu Gly Val Cys Gly Cys Gly Gln Ile
 65 70 75 80
 Leu Arg Gly Ser Arg Pro Trp Glu Pro Thr Val Ser Gly Gly Trp Glu
 85 90 95
 Phe Leu Val Arg Gln Thr
 100

<210> 4050

<211> 924

<212> PRT

<213> Homo sapiens

<400> 4050

Met	Arg	Ser	Lys	Asp	Ile	Glu	Ala	Ser	Gly	Phe	Asn	Gly	Thr	Ala	Ala
1					5						10				15
Phe	Met	Glu	Val	Arg	Val	Gln	Ser	Ile	Val	Val	Glu	Phe	Ile	Leu	Thr
			20					25					30		
His	Val	Asp	Gln	Leu	Phe	Gly	Gly	Ala	Ala	Leu	Ser	Gly	Gly	Glu	Val
		35					40					45			
Glu	Ser	Gly	Trp	Arg	Ser	Leu	Pro	Gly	Thr	Arg	Ala	Ser	Gly	Ser	Pro
	50					55				60					
Glu	Asp	Leu	Met	Pro	Arg	Pro	Leu	Pro	Tyr	His	Leu	Pro	Ser	Ile	Leu
65					70					75					80
Gln	Ala	Gly	Asp	Gly	Pro	Pro	Gln	Met	Arg	Pro	Tyr	His	Thr	Ile	Ile
				85				90						95	
Glu	Ile	Ala	Glu	His	Lys	Arg	Lys	Gly	Ser	Leu	Lys	Val	Arg	Lys	Trp
		100						105					110		
Arg	Ser	Ile	Phe	Asn	Leu	Gly	Arg	Ser	Gly	His	Glu	Thr	Lys	Arg	Lys
		115					120					125			
Leu	Pro	Arg	Gly	Ala	Glu	Asp	Arg	Glu	Asp	Lys	Ser	Asn	Lys	Gly	Thr
	130					135					140				
Leu	Arg	Pro	Ala	Lys	Ser	Met	Asp	Ser	Leu	Ser	Ala	Ala	Ala	Gly	Ala
145				150						155				160	
Ser	Asp	Glu	Pro	Glu	Gly	Leu	Val	Gly	Pro	Ser	Ser	Pro	Arg	Pro	Ser
			165						170				175		
Pro	Leu	Leu	Pro	Glu	Ser	Leu	Glu	Asn	Asp	Ser	Ile	Glu	Ala	Ala	Glu
		180						185				190			
Gly	Glu	Gln	Glu	Pro	Glu	Ala	Glu	Ala	Leu	Gly	Gly	Thr	Asn	Ser	Glu
		195				200						205			
Pro	Gly	Thr	Pro	Arg	Ala	Gly	Arg	Ser	Ala	Ile	Arg	Ala	Gly	Gly	Ser
	210					215					220				
Ser	Arg	Ala	Glu	Arg	Cys	Ala	Gly	Val	His	Ile	Ser	Asp	Pro	Tyr	Asn
225				230						235				240	
Val	Asn	Leu	Pro	Leu	His	Ile	Thr	Ser	Ile	Leu	Ser	Val	Pro	Pro	Asn
			245					250					255		
Ile	Ile	Ser	Asn	Val	Ser	Leu	Ala	Arg	Leu	Thr	Arg	Gly	Leu	Glu	Cys
		260						265					270		
Pro	Ala	Leu	Gln	His	Arg	Pro	Ser	Pro	Ala	Ser	Ser	Pro	Gly	Pro	Gly
	275							280					285		

Pro Gly Leu Gly Pro Gly Pro Pro Asp Glu Lys Leu Glu Ala Ser Pro
 290 295 300
 Ala Ser Ser Pro Leu Ala Asp Ser Gly Pro Asp Asp Leu Ala Pro Ala
 305 310 315 320
 Leu Glu Asp Ser Leu Ser Gln Glu Val Gln Asp Ser Phe Ser Phe Leu
 325 330 335
 Glu Asp Ser Ser Ser Ser Glu Pro Glu Trp Val Gly Ala Glu Asp Gly
 340 345 350
 Glu Val Ala Gln Ala Glu Ala Ala Gly Ala Ala Phe Ser Pro Gly Glu
 355 360 365
 Asp Asp Pro Gly Met Gly Tyr Leu Glu Glu Leu Leu Gly Val Gly Pro
 370 375 380
 Gln Val Glu Glu Phe Ser Val Glu Pro Pro Leu Asp Asp Leu Ser Leu
 385 390 395 400
 Asp Glu Ala Gln Phe Val Leu Ala Pro Ser Cys Cys Ser Leu Asp Ser
 405 410 415
 Ala Gly Pro Arg Pro Glu Val Glu Glu Glu Asn Gly Glu Glu Val Phe
 420 425 430
 Leu Ser Ala Tyr Asp Asp Leu Ser Pro Leu Leu Gly Pro Lys Pro Pro
 435 440 445
 Ile Trp Lys Gly Ser Gly Ser Leu Glu Gly Glu Ala Ala Gly Cys Gly
 450 455 460
 Arg Gln Ala Leu Gly Gln Gly Gly Glu Glu Gln Ala Cys Trp Glu Val
 465 470 475 480
 Gly Glu Asp Lys Gln Ala Glu Pro Gly Gly Arg Leu Asp Ile Arg Glu
 485 490 495
 Glu Ala Glu Gly Ser Pro Glu Thr Lys Val Glu Ala Gly Lys Ala Ser
 500 505 510
 Glu Asp Arg Gly Glu Ala Gly Gly Ser Gln Glu Thr Lys Val Arg Leu
 515 520 525
 Arg Glu Gly Ser Arg Glu Glu Thr Glu Ala Lys Glu Glu Lys Ser Lys
 530 535 540
 Gly Gln Lys Lys Ala Asp Ser Met Glu Ala Lys Gly Val Glu Glu Pro
 545 550 555 560
 Gly Gly Asp Glu Tyr Thr Asp Glu Lys Glu Lys Glu Ile Glu Arg Glu
 565 570 575

Glu Asp Glu Gln Arg Glu Glu Ala Gln Val Glu Ala Gly Arg Asp Leu
 580 585 590
 Glu Gln Gly Ala Gln Glu Asp Gln Val Ala Glu Glu Lys Trp Glu Val
 595 600 605
 Val Gln Lys Gln Glu Ala Glu Gly Val Arg Glu Asp Glu Asp Lys Gly
 610 615 620
 Gln Arg Glu Lys Gly Tyr His Glu Ala Arg Lys Asp Gln Gly Asp Gly
 625 630 635 640
 Glu Asp Ser Arg Ser Pro Glu Ala Ala Thr Glu Gly Gly Ala Gly Glu
 645 650 655
 Val Ser Lys Glu Arg Glu Ser Gly Asp Gly Glu Ala Glu Gly Asp Gln
 660 665 670
 Arg Ala Gly Gly Tyr Tyr Leu Glu Glu Asp Thr Leu Ser Glu Gly Ser
 675 680 685
 Gly Val Ala Ser Leu Glu Val Asp Cys Ala Lys Glu Gly Asn Pro His
 690 695 700
 Ser Ser Glu Met Glu Glu Val Ala Pro Gln Pro Pro Gln Pro Glu Glu
 705 710 715 720
 Met Glu Pro Glu Gly Gln Pro Ser Pro Asp Gly Cys Leu Cys Pro Cys
 725 730 735
 Ser Leu Gly Leu Gly Gly Val Gly Met Arg Leu Ala Ser Thr Leu Val
 740 745 750
 Gln Val Gln Gln Val Arg Ser Val Pro Val Val Pro Pro Lys Pro Gln
 755 760 765
 Phe Ala Lys Met Pro Ser Ala Met Cys Ser Lys Ile His Val Ala Pro
 770 775 780
 Ala Asn Pro Cys Pro Arg Pro Gly Arg Leu Asp Gly Thr Pro Gly Glu
 785 790 795 800
 Arg Ala Trp Glu Ser Arg Ala Ser Arg Ser Ser Trp Arg Asn Gly Gly
 805 810 815
 Ser Leu Ser Phe Asp Ala Ala Val Ala Leu Ala Arg Asp Arg Gln Arg
 820 825 830
 Thr Glu Ala Gln Gly Val Arg Arg Thr Gln Thr Cys Thr Glu Gly Gly
 835 840 845
 Asp Tyr Cys Leu Ile Pro Arg Thr Ser Pro Cys Ser Met Ile Ser Ala
 850 855 860

His Ser Pro Arg Pro Leu Ser Cys Leu Glu Leu Pro Ser Glu Gly Ala
 865 870 875 880
 Glu Gly Ser Gly Ser Arg Ser Arg Leu Ser Leu Pro Pro Arg Glu Pro
 885 890 895
 Gln Val Pro Asp Pro Leu Leu Ser Ser Gln Arg Arg Ser Tyr Ala Phe
 900 905 910
 Glu Thr Gln Ala Asn Pro Gly Lys Gly Glu Gly Leu
 915 920

<210> 4051

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4051

Met Ile Leu Ser Cys Ile Asn Cys Gln Gly Asp Asn Arg Arg Cys Val
 1 5 10 15
 Pro Arg Pro Pro Leu Val Ser Arg Leu Glu Glu Ser Pro Gly Trp Cys
 20 25 30
 Ile Arg Ala Arg Gln Arg Gly Arg Pro Ser Gln Leu His Cys Lys Gln
 35 40 45
 Phe Gln Leu His Ser Gln Gly Gln Ala Pro Trp Lys Arg Leu Leu Phe
 50 55 60
 Asn Cys Trp Pro Phe Gln Pro His Cys Ala Asp Ser Ser Phe Ser Leu
 65 70 75 80
 Gly Tyr Gln Ser Val Pro Leu Gln Phe Thr Ile Val Phe Val Phe Leu
 85 90 95
 Ser Phe Thr Asn Cys Asp Met Ser Lys Leu Asn Tyr Ala Ile
 100 105 110

<210> 4052

<211> 151

<212> PRT

<213> Homo sapiens

<400> 4052

Met His Ala Gly Lys Arg Ser Pro Leu Thr Gln Ser Ile Ser Cys Val
 1 5 10 15
 Cys Leu Pro Glu Leu Gly Ala Leu Trp Glu Ile Glu Ser Ala Arg Val
 20 25 30
 Asn Leu Arg Val Ser Gly Arg Glu Ala Ser Arg Glu Met Glu Ser Ser
 35 40 45
 Pro Arg Pro His Arg Ile Ala Gly Val Lys Arg Phe Leu Lys His Ala
 50 55 60
 Gly Lys Trp Ser Leu Arg Trp Phe Leu Ser Pro Arg Trp Ile Leu Gln
 65 70 75 80
 Phe Arg Arg Trp Ala Arg Lys Trp Ser Arg Phe Thr Arg Ser Ser Phe
 85 90 95
 Gln Val Arg Trp Ala Ala Val Pro Ala Gly Lys Cys Ser Gln His Gln
 100 105 110
 Gly Leu Ser Ala Val Ala Thr Ala Ser Pro Gly Val Phe Trp Glu Met
 115 120 125
 Glu Phe Asp Val Ser Ser Pro Leu Thr Glu Gly Ala Gly Ser Pro Met
 130 135 140
 Ser Ser Lys His Ala Gly Glu
 145 150

<210> 4053

<211> 150

<212> PRT

<213> Homo sapiens

<400> 4053

Met Arg Ile Pro Leu Pro His Leu Met Ser Ser Tyr Ile Lys Asp Leu
 1 5 10 15
 Cys Arg Ser Gly Ile Cys Glu Ser Leu Val Ser Asp Ala Val Leu Phe
 20 25 30
 Ser Leu Thr Pro Val Ile Pro Glu Leu Trp Glu Ala Glu Thr Gly Arg
 35 40 45

Ser Pro Asp Val Gly Ser Ser Arg Pro Ser Trp Pro Thr Trp Arg Ser
 50 55 60
 Leu Ser Leu Leu Lys Ile Gln Lys Leu Ala Ser Arg Gly Ser Ala Cys
 65 70 75 80
 Leu Trp Ser Gln Leu Leu Gly Ser Leu Arg Gln Glu Asn Cys Leu Asn
 85 90 95
 Leu Gly Gly Gly Gly Cys Ser Glu Pro Lys Leu Cys Arg Cys Thr Pro
 100 105 110
 Ala Trp Val Thr Val Arg Ile Cys Leu Lys Lys Lys Lys Lys Lys Asn
 115 120 125
 Trp Leu Gly Ala Val Ala Leu Ala Ser Asn Pro Asp Thr Leu Arg Gly
 130 135 140
 Leu Val Trp Arg Ile Ala
 145 150

<210> 4054

<211> 1260

<212> PRT

<213> Homo sapiens

<400> 4054

Met Gly Val Tyr Pro Thr Asp Leu Thr Leu Gln Leu Leu Ala Val Arg
 1 5 10 15
 Arg Lys Ser Arg Leu Arg Asp Pro Gly Leu Gln Gln Thr Leu Arg Gly
 20 25 30
 Gln Leu Arg Leu Leu Glu Asn Asp Ser Arg Glu Met Ala Arg Val Leu
 35 40 45
 Gly Glu Leu Ser Ala Arg Leu Leu Ser Ile His Ser Asp Gln Asp Arg
 50 55 60
 Ile Val Val Thr Phe Lys Thr Phe Glu Glu Ile Trp Lys Phe Ser Thr
 65 70 75 80
 Tyr His Ala Leu Gly Phe Thr His His Cys Leu Ala Asn Leu Leu Met
 85 90 95
 Asp Gln Ala Phe Trp Leu Leu Leu Pro Ser Glu Glu Glu Glu Thr Ala
 100 105 110

Ile Gln Val His Val Asp Glu Asn Ala Leu Arg Leu Thr His Glu Ser
 115 120 125
 Leu Leu Ile Gln Glu Gly Pro Phe Phe Val Leu Cys Pro Asp His His
 130 135 140
 Val Arg Val Met Thr Gly Pro Arg Asp Ala Gly Asn Gly Pro Gln Ala
 145 150 155 160
 Leu Arg Gln Ala Ser Gly Ala Pro Gln Gly Glu Ala Ala Pro Glu Thr
 165 170 175
 Asp Ser Ser Pro Pro Ser Pro Ser Val Ser Ser Glu Glu Val Ala Val
 180 185 190
 Ala Ala Ala Pro Glu Pro Leu Ile Pro Phe His Gln Trp Ala Leu Arg
 195 200 205
 Ile Pro Gln Asp Pro Ile Asp Asp Ala Met Gly Gly Pro Val Met Pro
 210 215 220
 Gly Asn Pro Leu Met Ala Val Gly Leu Ala Ser Ala Leu Ala Asp Phe
 225 230 235 240
 Gln Gly Ser Gly Pro Glu Glu Met Thr Phe Arg Gly Gly Asp Leu Ile
 245 250 255
 Glu Ile Leu Gly Ala Gln Val Pro Ser Leu Pro Trp Cys Val Gly Arg
 260 265 270
 His Ala Ala Ser Gly Arg Val Gly Phe Val Arg Ser Ser Leu Ile Ser
 275 280 285
 Met Gln Gly Pro Val Ser Glu Leu Glu Ser Ala Ile Phe Leu Asn Glu
 290 295 300
 Glu Glu Lys Ser Phe Phe Ser Glu Gly Cys Phe Ser Glu Glu Asp Ala
 305 310 315 320
 Arg Gln Leu Leu Arg Arg Met Ser Gly Thr Asp Val Cys Ser Val Tyr
 325 330 335
 Ser Leu Asp Ser Val Glu Glu Ala Glu Thr Glu Gln Pro Gln Glu Lys
 340 345 350
 Glu Ile Pro Pro Pro Cys Leu Ser Pro Glu Pro Gln Glu Thr Leu Gln
 355 360 365
 Lys Val Lys Asn Val Leu Glu Gln Cys Lys Thr Cys Pro Gly Cys Pro
 370 375 380
 Gln Glu Pro Ala Ser Trp Gly Leu Cys Ala Ala Ser Ser Asp Val Ser

385	390	395	400
Leu Gln Asp Pro Glu Glu Pro Ser Phe Cys Leu Glu Ala Glu Asp Asp			
	405	410	415
Trp Glu Asp Pro Glu Ala Leu Ser Ser Leu Leu Leu Phe Leu Asn Ala			
	420	425	430
Pro Gly Tyr Lys Ala Ser Phe Arg Gly Leu Tyr Asp Val Ala Leu Pro			
	435	440	445
Trp Leu Ser Ser Val Phe Arg Ser Phe Ser Asp Glu Glu Glu Leu Thr			
	450	455	460
Gly Arg Leu Ala Gln Ala Arg Gly Ala Ala Lys Lys Ala Gly Leu Leu			
465	470	475	480
Met Ala Leu Ala Arg Leu Cys Phe Leu Leu Gly Arg Leu Cys Ser Arg			
	485	490	495
Arg Leu Lys Leu Ser Gln Ala Arg Val Tyr Phe Glu Glu Ala Leu Gly			
	500	505	510
Ala Leu Glu Gly Ser Phe Gly Asp Leu Phe Leu Val Val Ala Val Tyr			
	515	520	525
Ala Asn Leu Ala Ser Ile Tyr Arg Lys Gln Lys Asn Arg Glu Lys Cys			
	530	535	540
Ala Gln Val Val Pro Lys Ala Met Ala Leu Leu Leu Gly Thr Pro Asp			
545	550	555	560
His Ile Cys Ser Thr Glu Ala Glu Gly Glu Leu Leu Gln Leu Ala Leu			
	565	570	575
Arg Arg Ala Val Gly Gly Gln Ser Leu Gln Ala Glu Ala Arg Ala Cys			
	580	585	590
Phe Leu Leu Ala Arg His His Val His Leu Lys Gln Pro Glu Glu Ala			
	595	600	605
Leu Pro Phe Leu Glu Arg Leu Leu Leu Leu His Arg Asp Ser Gly Ala			
	610	615	620
Pro Glu Ala Ala Trp Leu Ser Asp Cys Tyr Leu Leu Leu Ala Asp Ile			
625	630	635	640
Tyr Ser Arg Lys Cys Leu Pro His Leu Val Leu Ser Cys Val Lys Val			
	645	650	655
Ala Ser Leu Arg Thr Arg Gly Ser Leu Ala Gly Ser Leu Arg Ser Val			
	660	665	670
Asn Leu Val Leu Gln Asn Ala Pro Gln Pro His Ser Leu Pro Ala Gln			

675	680	685
Thr Ser His Tyr Leu Arg Gln Ala	Leu Ala Ser Leu Thr Pro Gly Thr	
690	695	700
Gly Gln Ala Leu Cys Gly Pro Leu Tyr Thr	Ser Leu Ala Gln Leu Tyr	
705	710	715
Ser His His Gly Cys His Gly Pro Ala Ile Thr Phe Met Thr Gln Ala		720
	725	730
Val Glu Ala Ser Ala Ile Ala Gly Val Arg Ala Ile Val Asp His Leu		735
	740	745
Val Ala Leu Ala Trp Leu His Val Leu His Gly Gln Ser Pro Val Ala		750
	755	760
Leu Asp Ile Leu Gln Ser Val Arg Asp Ala Val Val Ala Ser Glu Asp		765
	770	775
Gln Glu Gly Val Ile Ala Asn Met Val Ala Val Ala Leu Lys Arg Thr		780
	785	790
Gly Arg Thr Arg Gln Ala Ala Glu Ser Tyr Tyr Arg Ala Leu Arg Val		795
	800	805
Ala Arg Asp Leu Gly Gln Gln Arg Asn Gln Ala Val Gly Leu Ala Asn		810
	815	820
Phe Gly Ala Leu Cys Leu His Ala Gly Ala Ser Arg Leu Ala Gln His		825
	830	835
Tyr Leu Leu Glu Ala Val Arg Leu Phe Ser Arg Leu Pro Leu Gly Glu		840
	845	850
Cys Gly Arg Asp Phe Thr His Val Leu Leu Gln Leu Gly His Leu Cys		855
	860	865
Thr Arg Gln Gly Pro Ala Gln Gln Gly Lys Gly Tyr Tyr Glu Trp Ala		870
	875	880
Leu Leu Val Ala Val Glu Met Gly His Val Glu Ser Gln Leu Arg Ala		885
	890	895
Val Gln Arg Leu Cys His Phe Tyr Ser Ala Val Met Pro Ser Glu Ala		900
	905	910
Gln Cys Val Ile Tyr His Glu Leu Gln Leu Ser Leu Ala Cys Lys Val		915
	920	925
Ala Asp Lys Val Leu Glu Gly Gln Leu Leu Glu Thr Ile Ser Gln Leu		930
	935	940
Tyr Leu Ser Leu Gly Thr Glu Arg Ala Tyr Lys Ser Ala Leu Asp Tyr		945
	950	955
	960	

965	970	975
Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu Gln Lys Lys Glu Lys		
980	985	990
Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile Tyr Tyr Ile Leu Arg		
995	1000	1005
Gln Ser Glu Leu Val Asp Leu Tyr Ile Gln Val Ala Gln Asn Val Ala		
1010	1015	1020
Leu Tyr Thr Gly Asp Pro Asn Leu Gly Leu Glu Leu Phe Glu Ala Ala		
1025	1030	1035
Gly Asp Ile Phe Phe Asp Gly Ala Trp Glu Arg Glu Lys Ala Val Ser		
1045	1050	1055
Phe Tyr Arg Asp Arg Ala Leu Pro Leu Ala Val Thr Thr Gly Asn Arg		
1060	1065	1070
Lys Ala Glu Leu Arg Leu Cys Asn Lys Leu Val Ala Leu Leu Ala Thr		
1075	1080	1085
Leu Glu Glu Pro Gln Glu Gly Leu Glu Phe Ala His Met Ala Leu Ala		
1090	1095	1100
Leu Ser Ile Thr Leu Gly Asp Arg Leu Asn Glu Arg Val Ala Tyr His		
1105	1110	1115
Arg Leu Ala Ala Leu Gln His Arg Leu Gly His Gly Glu Leu Ala Glu		
1125	1130	1135
His Phe Tyr Leu Lys Ala Leu Ser Leu Cys Asn Ser Pro Leu Glu Phe		
1140	1145	1150
Asp Glu Glu Thr Leu Tyr Tyr Val Lys Val Tyr Leu Val Leu Gly Asp		
1155	1160	1165
Ile Ile Phe Tyr Asp Leu Lys Asp Pro Phe Asp Ala Ala Gly Tyr Tyr		
1170	1175	1180
Gln Leu Ala Leu Ala Ala Ala Val Asp Leu Gly Asn Lys Lys Ala Gln		
1185	1190	1195
Leu Lys Ile Tyr Thr Arg Leu Ala Thr Ile Tyr His Asn Phe Leu Leu		
1205	1210	1215
Asp Arg Glu Lys Ser Leu Phe Phe Tyr Gln Lys Ala Arg Thr Phe Ala		
1220	1225	1230
Thr Glu Leu Asn Val Arg Arg Val Asn Leu Pro Pro Leu Pro Leu Cys		
1235	1240	1245
Gly Trp Ala Pro Trp Leu Ala Pro Ser His Pro Arg		

1250

1255

1260

<210> 4055

<211> 152

<212> PRT

<213> Homo sapiens

<400> 4055

Met Gly Phe Ala Glu Ala Phe Leu Glu His Leu Trp Lys Asn Leu Gln
 1 5 10 15
 Asp Pro Ser Asn Pro Ala Ile Ile Arg Gln Ala Ala Gly Asn Tyr Ile
 20 25 30
 Gly Ser Phe Leu Ala Arg Ala Lys Phe Ile Ser Leu Ile Thr Val Lys
 35 40 45
 Pro Cys Leu Asp Leu Leu Val Asn Trp Leu His Ile Tyr Leu Asn Asn
 50 55 60
 Gln Asp Ser Gly Thr Lys Ala Phe Cys Asp Val Ala Leu His Gly Pro
 65 70 75 80
 Phe Tyr Ser Ala Cys Gln Ala Val Phe Tyr Thr Phe Val Phe Arg His
 85 90 95
 Lys Gln Leu Leu Ser Gly Asn Leu Lys Glu Gly Leu Gln Tyr Pro Gln
 100 105 110
 Ser Leu Asn Phe Glu Arg Ile Val Met Ser Gln Leu Asn Pro Leu Lys
 115 120 125
 Ile Cys Leu Pro Ser Val Val Asn Phe Phe Ala Ala Ile Thr Lys Met
 130 135 140
 Lys Thr Cys Gly Tyr Gly Trp Trp
 145 150

<210> 4056

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4056

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Met Leu Leu Cys Trp Leu Ser Leu Pro His Arg Lys Val Phe Ser Phe
 1             5             10             15
Leu Phe Phe Ser Phe Phe Leu Phe Phe Phe Phe Phe Leu Arg Arg
      20             25             30
Thr Leu Pro Leu Leu Thr Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala
      35             40             45
His His Asn Leu Arg Leu Leu Gly Ser Ser Asp Ser Pro Ala Leu Ala
      50             55             60
Ser Arg Val Ala Gly Thr Met Gly Ala His Tyr His Ala Trp Leu Ile
      65             70             75             80
Phe Val Phe Leu Val Glu Thr Lys Phe His Tyr Val Gly Lys Ala Gly
      85             90             95
Leu Lys Leu Leu Thr Ser
      100

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<210> 4057

<211> 143

<212> PRT

<213> Homo sapiens

<400> 4057

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Met Pro Val Ile Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu
 1             5             10             15
Glu Val Arg Gly Ser Gly Pro Ala Trp Pro Thr Trp Trp Asn Pro Val
      20             25             30
Ser Thr Lys Asn Thr Lys Val Ser Trp Met Trp Trp Arg Val Pro Val
      35             40             45
Val Pro Ala Ala Arg Glu Ala Glu Ala Gly Glu Ala Leu Glu Pro Gly
      50             55             60
Arg Arg Arg Leu Gln Trp Ala Glu Val Val Ser Leu His Ser Ser Leu
      65             70             75             80
Gly Val Thr Val Arg Ile Cys Leu Lys Lys Arg Lys Lys Lys Lys Lys
      85             90             95
Asn Pro Arg Lys Asn Lys Glu Thr Gln Met Leu Gly Val Gly Ile Asn

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	100		105		110										
Tyr	Met	Thr	Pro	Tyr	Arg	Cys	Gln	Pro	Leu	His	Pro	Ser	Leu	Phe	Gln
	115		120		125										
Thr	Pro	Cys	Arg	Val	Ser	Tyr	Val	Leu	Arg	Leu	Leu	Lys	Asn	Lys	
	130		135		140										

<210> 4058

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4058

Met	Arg	Lys	His	Ile	Lys	Glu	Arg	Glu	Leu	Ser	Leu	Met	Glu	Gln	Ile
1				5					10					15	
Lys	Glu	Phe	Ile	Leu	Glu	Arg	Asn	Thr	Met	Asn	Val	Pro	Thr	Val	Gly
				20					25					30	
Lys	Pro	Phe	Ser	Gly	Arg	His	Ser	Leu	Leu	Ser	Ile	Arg	Glu	Phe	Thr
				35					40					45	
Leu	Gly	Arg	Ser	Pro	Met	Asn	Val	Met	Asn	Val	Gly	Glu	Pro	Ser	Glu
				50					55					60	
Lys	Lys	Pro	Thr	Cys	Met	Ile	Ile	Arg	Glu	Phe	Ile	Leu	Glu	Lys	Asn
				65					70					75	
Pro	Ile	Leu	Val	Arg	Asn	Val	Gly	Lys	Thr	Ser	Ala	Glu	Val	Gln	Leu
				85					90					95	
Leu	Leu	Asn	Thr	Arg	Glu	Phe	Ile	Leu	Glu	Ile	Asn	Ser	Arg	Asn	Arg
				100					105					110	
Glu	Ile	Lys	Glu	Phe	Ala	Glu	Cys	Phe	Ser						
				115					120						

<210> 4059

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4059

Met Glu Ile Ser Ala Pro Ser Gln Gln Arg Gln Gln Ile Ala Glu Ile
 1 5 10 15
 Glu Lys Gln Thr Lys Glu Gln Ser Gln Leu Thr Ala Thr Gln Thr Arg
 20 25 30
 Thr Val Asn Lys His Gly Asp Glu Ile Ile Thr Ser Thr Thr Ser Asn
 35 40 45
 Tyr Glu Thr Gln Thr Phe Ser Ser Lys Thr Glu Trp Arg Val Arg Ala
 50 55 60
 Ile Ser Ala Ala Asn Leu His Leu Arg Thr Asn His Ile Tyr Val Ser
 65 70 75 80
 Ser Asp Asp Ile Lys Glu Thr Gly Tyr Thr Tyr Ile Leu Pro Lys Asn
 85 90 95
 Val Leu Lys Lys Phe Ile Cys Ile Ser Asp Leu Arg Ala Gln Val Ser
 100 105 110
 Lys Trp Thr Gln Leu Gly His Ser Val Cys Pro Thr His Phe Val Pro
 115 120 125
 Lys Thr Gln Thr
 130

<210> 4060

<211> 271

<212> PRT

<213> Homo sapiens

<400> 4060

Met Ala Ala Val Glu Lys Arg Arg Gln Ala Val Pro Pro Pro Ala Gly
 1 5 10 15
 Phe Thr Asp Ser Gly Arg Gln Ser Val Ser Arg Ala Ala Gly Ala Ala
 20 25 30
 Glu Ser Glu Glu Asp Phe Leu Arg Gln Val Gly Val Thr Glu Met Leu
 35 40 45
 Arg Ala Ala Leu Leu Lys Val Leu Glu Ala Arg Pro Glu Glu Pro Ile
 50 55 60
 Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val

65	70	75	80
Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Leu Gln Gln Gln			
	85	90	95
Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Gln			
	100	105	110
Arg Ala Ala Phe Asn Asn Asn Val Ser Val Ala Tyr Glu Cys Leu Ser			
	115	120	125
Ala Gly Gly Arg Arg Lys Arg Pro Gly Leu Asp Gly Arg Thr Tyr Ser			
	130	135	140
Glu Leu Leu Arg Arg Ile Cys Arg Asp Gly Gln Ala Pro Glu Glu Val			
145	150	155	160
Val Ala Pro Leu Leu Arg Lys Val Gln Cys Arg Asp His Glu Ala Val			
	165	170	175
Pro Leu Ser Val Phe Arg Ala Gly Thr Leu Thr Cys Phe Val Leu Leu			
	180	185	190
Glu Phe Val Ala Arg Ala Gly Ala Leu Phe Gln Leu Leu Glu Asp Ser			
	195	200	205
Ala Ala Ala Val Ala Asp Arg Arg Val Gly Gln Ala Val Leu Asp Thr			
	210	215	220
Leu Glu Gly Ala Leu Gln Ala Ser Asp Ala Ala Ala Pro Ala Arg Phe			
225	230	235	240
Leu Glu Ala Gly Ser Arg Leu Ala Pro Met Thr Arg Glu Glu Phe Leu			
	245	250	255
Glu Arg Ala Ala Ala Leu Phe Ile Ala Lys Val Lys Pro Val Gly			
	260	265	270

<210> 4061

<211> 167

<212> PRT

<213> Homo sapiens

<400> 4061

Met Glu Ala Pro His Pro Phe His Ser Gly Val Ala Ala Thr His His
1 5 10 15
Lys Ser Thr Phe Arg Ser Glu Leu Phe Arg Gly Gly Ser Arg Gln Phe

20 25 30
 Val Ser Pro Gly Arg Pro Ala Gly Phe Pro Ala Cys Cys Gly Leu Ser
 35 40 45
 Val Gly Pro Thr Gly Ala Gly Glu Gly Trp Arg Gly Leu Ala Gly Thr
 50 55 60
 Arg Gly Ala Glu Pro Ala Leu Ala Lys Pro Ser Ser Glu Glu Arg Arg
 65 70 75 80
 Leu Trp Leu Arg Ala Leu Arg Ser Gln Val Ala Gly Ser Ser Arg Gly
 85 90 95
 Ser Gly Pro Val Pro Ser Ala Asp Pro Gly Ser Arg Ala Leu Val Val
 100 105 110
 Ser Ala Gly Gly Lys Val Thr Arg Ser Gly Arg Arg Arg Val Arg
 115 120 125
 Gly Ala Glu Arg Gly Lys Glu Arg Val Gln Arg Ala Gly Glu Ser Phe
 130 135 140
 Arg Lys Ser Gly Arg Gly Arg Tyr Leu Pro Val Pro Ser Pro Arg Ala
 145 150 155 160
 Thr Arg Gln Ile Gly Glu Gly
 165

<210> 4062

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4062

Met Phe Phe Cys His Gly Phe Ser Trp Ser Leu His Leu Gly Pro Leu
 1 5 10 15
 Thr Ser His Asn Thr Asp Gln Arg Gly Glu Thr Pro Ser Leu Leu Lys
 20 25 30
 Val Gln Gly Ser Ala Glu Cys Ala Gly Ala Ser Leu Glu Ser Gln Leu
 35 40 45
 Leu Gly Arg Leu Arg Arg Glu Asn Arg Leu Asn Pro Gly Gly Trp Gly
 50 55 60
 Cys Ser Glu Leu Arg Ser Cys His Cys Thr Pro Ala Trp Arg Gln Ser

65 70 75 80
 Lys Thr Pro Phe Gln Thr Asn Lys Gln Met Asn Ile Ala Ile Ile Leu
 85 90 95
 Lys Tyr Tyr Val Arg Ile Lys Tyr Val Ile Phe Arg Phe Leu Leu Met
 100 105 110
 Tyr Asn Met His Thr Glu Ile His Pro Gln
 115 120

<210> 4063

<211> 142

<212> PRT

<213> Homo sapiens

<400> 4063

Met Pro Val Phe Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Val His
 1 5 10 15
 His His Ala Gly Leu Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe
 20 25 30
 Leu Tyr Val Gly Gln Ala Asp Leu Glu Leu Pro Thr Ser Gly Asp Pro
 35 40 45
 Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys
 50 55 60
 Thr Arg Leu Ser Leu Val Leu Arg His Leu Leu Asp Thr Pro Ser Leu
 65 70 75 80
 Arg Ala Glu Arg Ser Pro Arg Pro Val Pro Arg Asp Lys Ala Gln Gly
 85 90 95
 Arg Val Tyr Leu Gly Ser Arg Gly Gly Glu Gly Val Glu Lys Ala Glu
 100 105 110
 Leu Glu Ser Ile Thr Leu Pro Thr Asn His Gln Thr Ala Gly Thr Leu
 115 120 125
 Gln Pro Asn Ala Gly Arg Arg Thr Trp Arg Val Ser Leu Cys
 130 135 140

<210> 4064

<211> 160

<212> PRT

<213> Homo sapiens

<400> 4064

Met Phe Ala Pro Leu His Ser Gly Leu Asp Asp Arg Val Arg Leu Cys
 1 5 10 15
 Leu Lys Lys Lys Lys Ile Ile Ile Thr Asn Leu Ala Asn Gly Arg Leu
 20 25 30
 Phe Lys Leu Thr Cys Val Phe Leu Thr His Pro His His Phe Phe Thr
 35 40 45
 Arg Phe Leu Ala Phe Trp His Lys Ile Val Phe Phe Leu Cys Ser Asn
 50 55 60
 Pro Gly Ile Ser His Phe Pro Arg Glu Leu Trp Ile Leu Leu Val Glu
 65 70 75 80
 Ser Leu Asn Leu Gly Ile Leu Gln Asp Leu Asp Ala Arg Cys Ala His
 85 90 95
 Cys His Trp Gly Ala Thr Ala Leu His Ala Leu Ser Gly His Ser Gln
 100 105 110
 Gly Met Cys Val Cys Ser Phe Leu Cys Gly Met Lys Thr Met Cys Ser
 115 120 125
 Trp Cys Tyr Leu Met Thr Glu Val Ile Phe Ile Phe Ser Leu Ser Met
 130 135 140
 Phe Val Ala Leu Leu Ser Asp Gly Glu Lys Pro Gly Phe Tyr Tyr Leu
 145 150 155 160

<210> 4065

<211> 409

<212> PRT

<213> Homo sapiens

<400> 4065

Met Glu Glu Ser Trp Glu Ala Ala Pro Gly Gly Gln Ala Gly Ala Glu
 1 5 10 15
 Leu Pro Met Glu Pro Val Gly Ser Leu Val Pro Thr Leu Glu Gln Pro

	20		25		30
Gln Val Pro Ala Lys Val Arg Gln Pro Glu Gly Pro Glu Ser Ser Pro					
35		40		45	
Ser Pro Ala Gly Ala Val Glu Lys Ala Ala Gly Ala Gly Leu Glu Pro					
50		55		60	
Ser Ser Lys Lys Lys Pro Pro Ser Pro Arg Pro Gly Ser Pro Arg Val					
65		70		75	80
Pro Pro Leu Ser Leu Gly Tyr Gly Val Cys Pro Glu Pro Pro Ser Pro					
	85		90		95
Gly Pro Ala Leu Val Lys Leu Pro Arg Asn Gly Glu Ala Pro Gly Ala					
100		105		110	
Glu Pro Ala Pro Ser Ala Trp Ala Pro Met Glu Leu Gln Val Asp Val					
115		120		125	
Arg Val Lys Pro Val Gly Ala Ala Gly Gly Ser Ser Thr Pro Ser Pro					
130		135		140	
Arg Pro Ser Thr Arg Phe Leu Lys Val Pro Val Pro Glu Ser Pro Ala					
145		150		155	160
Phe Ser Arg His Ala Asp Pro Ala His Gln Leu Leu Leu Arg Ala Pro					
	165		170		175
Ser Gln Gly Gly Thr Trp Gly Arg Arg Ser Pro Leu Ala Ala Ala Arg					
180		185		190	
Thr Glu Ser Gly Cys Asp Ala Glu Gly Arg Ala Ser Pro Ala Glu Gly					
195		200		205	
Ser Ala Gly Ser Pro Gly Ser Pro Thr Cys Cys Arg Cys Lys Glu Leu					
210		215		220	
Gly Leu Glu Lys Glu Asp Ala Ala Leu Leu Pro Arg Ala Gly Leu Asp					
225		230		235	240
Gly Asp Glu Lys Leu Pro Arg Ala Val Thr Leu Thr Gly Leu Pro Met					
	245		250		255
Tyr Val Lys Ser Leu Tyr Trp Ala Leu Ala Phe Met Ala Val Leu Leu					
260		265		270	
Ala Val Ser Gly Val Val Ile Val Val Leu Ala Ser Arg Ala Gly Ala					
275		280		285	
Arg Cys Gln Gln Cys Pro Pro Gly Trp Val Leu Ser Glu Glu His Cys					
290		295		300	
Tyr Tyr Phe Ser Ala Glu Ala Gln Ala Trp Glu Ala Ser Gln Ala Phe					

305 310 315 320
 Cys Ser Ala Tyr His Ala Thr Leu Pro Leu Leu Ser His Thr Gln Asp
 325 330 335
 Phe Leu Gly Arg Tyr Pro Val Ser Arg His Ser Trp Val Gly Ala Trp
 340 345 350
 Arg Gly Pro Gln Gly Trp His Trp Ile Asp Glu Ala Pro Leu Pro Pro
 355 360 365
 Gln Leu Leu Pro Glu Asp Gly Glu Asp Asn Leu Asp Ile Asn Cys Gly
 370 375 380
 Ala Leu Glu Glu Gly Thr Leu Val Ala Ala Asn Cys Ser Thr Pro Arg
 385 390 395 400
 Pro Trp Val Cys Ala Lys Gly Thr Gln
 405

<210> 4066

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4066

Met Arg Cys Leu Arg Leu Arg Gln Ser Ser Leu Glu Pro Val Ala Phe
 1 5 10 15
 Arg Leu Pro Arg Val Arg Lys Glu Phe Phe Gln Asp Asp Val Phe Pro
 20 25 30
 Asp Thr Ala Val Ile Trp Glu Pro Val Leu Ser Ala Glu Ala Trp Leu
 35 40 45
 Gln Gly Ala Asn Gly Gln Pro Trp Leu Leu Ser Leu Gln Pro Pro Asp
 50 55 60
 Met Ser Pro Val Ser Gln Ala Pro Arg Glu Ala Pro Ala Arg Arg Ala
 65 70 75 80
 Pro Ser Ser Ala Gln Tyr Leu Glu Glu Lys Ser Asp Gln Gln Lys Lys
 85 90 95
 Glu Glu Val Gly Met Gly Glu Ser Ser Cys Ala Glu Val Thr Glu Ser
 100 105 110
 Trp Leu His Leu Ala Thr Ala Pro

115

120

<210> 4067

<211> 507

<212> PRT

<213> Homo sapiens

<400> 4067

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Met Ala Glu Leu Asp Gln Leu Pro Asp Glu Ser Ser Ser Ala Lys Ala
  1              5              10              15
Leu Val Ser Leu Lys Glu Gly Ser Leu Ser Asn Thr Trp Asn Glu Lys
      20              25              30
Tyr Ser Ser Leu Gln Lys Thr Pro Val Trp Lys Gly Arg Asn Thr Ser
      35              40              45
Ser Ala Val Glu Met Lys Phe Thr Ala Thr Met Ser Thr Pro Asp Lys
      50              55              60
Lys Ala Ser Gln Lys Ile Gly Phe Arg Leu Arg Asn Leu Leu Lys Leu
      65              70              75              80
Pro Lys Ala His Lys Trp Cys Ile Tyr Glu Trp Phe Tyr Ser Asn Ile
      85              90              95
Asp Lys Pro Leu Phe Glu Gly Asp Asn Asp Phe Cys Val Cys Leu Lys
      100             105             110
Glu Ser Phe Pro Asn Leu Lys Thr Arg Lys Leu Thr Arg Val Glu Trp
      115             120             125
Gly Lys Ile Arg Arg Leu Met Gly Lys Pro Arg Arg Cys Ser Ser Ala
      130             135             140
Phe Phe Glu Glu Glu Arg Ser Ala Leu Lys Gln Lys Arg Gln Lys Ile

145              150              155              160
Arg Leu Leu Gln Gln Arg Lys Val Ala Asp Val Ser Gln Phe Lys Asp
      165              170              175
Leu Pro Asp Glu Ile Pro Leu Pro Leu Val Ile Gly Thr Lys Val Thr
      180              185              190
Ala Arg Leu Arg Gly Val His Asp Gly Leu Phe Thr Gly Gln Ile Asp

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195	200	205
Ala Val Asp Thr Leu Asn Ala Thr Tyr Arg Val Thr Phe Asp Arg Thr		
210	215	220
Gly Leu Gly Thr His Thr Ile Pro Asp Tyr Glu Val Leu Ser Asn Glu		
225	230	235
Pro His Glu Thr Met Pro Ile Ala Ala Phe Gly Gln Lys Gln Arg Pro		
245	250	255
Ser Arg Phe Phe Met Thr Pro Pro Arg Leu His Tyr Thr Pro Pro Leu		
260	265	270
Gln Ser Pro Ile Ile Asp Asn Asp Pro Leu Leu Gly Gln Ser Pro Trp		
275	280	285
Arg Ser Lys Ile Ser Gly Ser Asp Thr Glu Thr Leu Gly Gly Phe Pro		
290	295	300
Val Glu Phe Leu Ile Gln Val Thr Arg Leu Ser Lys Ile Leu Met Ile		
305	310	315
Lys Lys Glu His Ile Lys Lys Leu Arg Glu Met Asn Thr Glu Ala Glu		
325	330	335
Lys Leu Lys Ser Tyr Ser Met Pro Ile Ser Ile Glu Phe Gln Arg Arg		
340	345	350
Tyr Ala Thr Ile Val Leu Glu Leu Glu Gln Leu Asn Lys Asp Leu Asn		
355	360	365
Lys Val Leu His Lys Val Gln Gln Tyr Cys Tyr Glu Leu Ala Pro Asp		
370	375	380
Gln Gly Leu Gln Pro Ala Asp Gln Pro Thr Asp Met Arg Arg Arg Cys		
385	390	395
Glu Glu Glu Ala Gln Glu Ile Val Arg His Ala Asn Ser Ser Thr Gly		
405	410	415
Gln Pro Cys Val Glu Asn Glu Asn Leu Thr Asp Leu Ile Ser Arg Leu		
420	425	430
Thr Ala Ile Leu Leu Gln Ile Lys Cys Leu Ala Glu Gly Gly Asp Leu		
435	440	445
Asn Ser Phe Glu Phe Lys Ser Leu Thr Asp Ser Leu Asn Asp Ile Lys		
450	455	460
Ser Thr Ile Asp Ala Ser Asn Ile Ser Cys Phe Gln Asn Asn Val Glu		
465	470	475
Ile His Val Ala His Ile Gln Ser Gly Leu Ser Gln Met Gly Asn Leu		

485 490 495
 His Ala Phe Ala Ala Asn Asn Thr Asn Arg Asp
 500 505

<210> 4068

<211> 601

<212> PRT

<213> Homo sapiens

<400> 4068

Met Ala Ala Leu Thr Pro Arg Lys Arg Lys Gln Asp Ser Leu Lys Cys
 1 5 10 15
 Asp Ser Leu Leu His Phe Thr Glu Asn Leu Phe Pro Ser Pro Asn Lys
 20 25 30
 Lys His Cys Phe Tyr Gln Asn Ser Asp Lys Asn Glu Glu Asn Leu His
 35 40 45
 Cys Ser Gln Gln Glu His Phe Val Leu Ser Ala Leu Lys Thr Thr Glu
 50 55 60
 Ile Asn Arg Leu Pro Ser Ala Asn Gln Gly Ser Pro Phe Lys Ser Ala
 65 70 75 80
 Leu Ser Thr Val Ser Phe Tyr Asn Gln Asn Lys Trp Tyr Leu Asn Pro
 85 90 95
 Leu Glu Arg Lys Leu Ile Lys Glu Ser Arg Ser Thr Cys Leu Lys Thr
 100 105 110
 Asn Asp Glu Asp Lys Ser Phe Pro Ile Val Thr Glu Lys Met Gln Gly
 115 120 125
 Lys Pro Val Cys Ser Lys Lys Asn Asn Lys Lys Pro Gln Lys Ser Leu
 130 135 140
 Thr Ala Lys Tyr Gln Pro Lys Tyr Arg His Ile Lys Pro Val Ser Arg
 145 150 155 160
 Asn Ser Arg Asn Ser Lys Gln Asn Arg Val Ile Tyr Lys Pro Ile Val
 165 170 175
 Glu Lys Glu Asn Asn Cys His Ser Ala Glu Asn Asn Ser Asn Ala Pro
 180 185 190
 Arg Val Leu Ser Gln Lys Ile Lys Pro Gln Val Thr Leu Gln Gly Gly

195	200	205
Ala Ala Phe Phe Val Arg Lys Lys Ser Ser Leu Arg Lys Ser Ser Leu		
210	215	220
Glu Asn Glu Pro Ser Leu Gly Arg Thr Gln Lys Ser Lys Ser Glu Val		
225	230	235
Ile Glu Asp Ser Asp Val Glu Thr Val Ser Glu Lys Lys Thr Phe Ala		
245	250	255
Thr Arg Gln Val Pro Lys Cys Leu Val Leu Glu Glu Lys Leu Lys Ile		
260	265	270
Gly Leu Leu Ser Ala Ser Ser Lys Asn Lys Glu Lys Leu Ile Lys Asp		
275	280	285
Ser Ser Asp Asp Arg Val Ser Ser Lys Glu His Lys Val Asp Lys Asn		
290	295	300
Glu Ala Phe Ser Ser Glu Asp Ser Leu Gly Glu Asn Lys Thr Ile Ser		
305	310	315
Pro Lys Ser Thr Val Tyr Pro Ile Phe Ser Ala Ser Ser Val Asn Ser		
325	330	335
Lys Arg Ser Leu Gly Glu Glu Gln Phe Ser Val Gly Ser Val Asn Phe		
340	345	350
Met Lys Gln Thr Asn Ile Gln Lys Asn Thr Asn Thr Arg Asp Thr Ser		
355	360	365
Lys Lys Thr Lys Asp Gln Leu Ile Ile Asp Ala Gly Gln Lys His Phe		
370	375	380
Gly Ala Thr Val Cys Lys Ser Cys Gly Met Ile Tyr Thr Ala Ser Asn		
385	390	395
Pro Glu Asp Glu Met Gln His Val Gln His His His Arg Phe Leu Glu		
405	410	415
Gly Ile Lys Tyr Val Gly Trp Lys Lys Glu Arg Val Val Ala Glu Phe		
420	425	430
Trp Asp Gly Lys Ile Val Leu Val Leu Pro His Asp Pro Ser Phe Ala		
435	440	445
Ile Lys Lys Val Glu Asp Val Gln Glu Leu Val Asp Asn Glu Leu Gly		
450	455	460
Phe Gln Gln Val Val Pro Lys Cys Pro Asn Lys Ile Lys Thr Phe Leu		
465	470	475
Phe Ile Ser Asp Glu Lys Arg Val Val Gly Cys Leu Ile Ala Glu Pro		

485 490 495
 Ile Lys Gln Ala Phe Arg Val Leu Ser Glu Pro Ile Gly Pro Glu Ser
 500 505 510
 Pro Ser Ser Thr Glu Cys Pro Arg Ala Trp Gln Cys Ser Asp Val Pro
 515 520 525
 Glu Pro Ala Val Cys Gly Ile Ser Arg Ile Trp Val Phe Arg Leu Lys
 530 535 540
 Arg Arg Lys Arg Ile Ala Arg Arg Leu Val Asp Thr Leu Arg Asn Cys
 545 550 555 560
 Phe Met Phe Gly Cys Phe Leu Ser Thr Asp Glu Ile Ala Phe Ser Asp
 565 570 575
 Pro Thr Pro Asp Gly Lys Leu Phe Ala Thr Lys Tyr Cys Asn Thr Pro
 580 585 590
 Asn Phe Leu Val Tyr Asn Phe Asn Ser
 595 600

<210> 4069

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4069

Met Gln Leu Arg Phe Arg Gly His Ser Ile Asn His Ser Leu Tyr Met
 1 5 10 15
 His Asn Ser Ser Gly Gly Ser Arg Val Ile Ile Ala Ser Arg Ser Gln
 20 25 30
 Ile Ser Tyr Phe Phe Ile Asn Ile Glu Thr Lys Leu Trp Ser Gln Ile
 35 40 45
 Val Asn Glu Arg Lys Ile His Tyr Ile Leu Glu Lys Glu Ala Asn Asp
 50 55 60
 Val Asn Lys Asp Glu Glu Val Glu Asp Gly His Arg Asn Cys Gln Arg
 65 70 75 80
 Arg Arg Trp Arg Lys Met Arg Pro Arg Gly Glu Thr Glu Ser Thr His
 85 90 95
 Phe Ser Val Gly Phe Pro Ser Met Ser Pro Lys Ser Lys Gly Gln Pro

100	105	110
Gly Ala Ser Pro Gln Ile Ile Leu Ala Ala Asp Ser Gln		
115	120	125

<210> 4070

<211> 179

<212> PRT

<213> Homo sapiens

<400> 4070

Met Gly Pro Ala Ala Ala Pro Gly His Leu Ser Ser Gly Gly Cys Cys		
1	5	10
Val Leu Pro Leu Pro Ser Val Leu Pro Pro Ser Ile Ser Ala Val Pro		
20	25	30
Gly Leu Ala Leu Leu Pro Gly Arg Trp Thr Leu Pro Ser Gln Trp Thr		
35	40	45
Arg Arg Leu Ala Ala Ser Ala Pro Pro Asp Arg Ser Pro Tyr Leu Ser		
50	55	60
Pro Arg Leu Gln Ser Pro Val Pro Thr Ala Ala His Val Ala Ser Phe		
65	70	75
Gln Ala Ala Ala Arg Ala Ser Gly Thr Ser Gly Ala Ser Thr Val Ala		
85	90	95
Cys Gly His Gly Pro Arg Ser Phe Ser Pro Leu Ser Ser Ser Ser Arg		
100	105	110
Ala Gly Pro Arg Val Ser Pro Gln Pro Asp Trp Leu Cys Leu Gln Met		
115	120	125
Met Leu Val Thr Gln Leu Phe Val Ser Arg Asn Ala Gly Gly Ile Ala		
130	135	140
Val Pro Phe Ser Gly Ser Ala Ala Phe Ser Leu Ala Val Ile Pro Pro		
145	150	155
Gly Glu Ala His Leu Gly Arg Phe Trp Ala Thr Ala Val Trp Leu His		
165	170	175
Ser Gly Gln		

<210> 4071

<211> 157

<212> PRT

<213> Homo sapiens

<400> 4071

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Met Gly Gly Ala Trp Ser Glu Ala Gln Glu Ala Asp Gly Gly Gly His
  1             5             10             15
Gln Gly Gln Glu Ala Ser Asn Pro Pro Leu Arg Ala Thr Pro Ser Leu
      20             25             30
Pro Gly Gly Gln Cys Leu Tyr Gly Leu Lys Ala Gly Pro Trp Gly Thr
      35             40             45
Thr Ala Asp Phe Cys Phe Asn Trp Lys Gln Thr Gly Ile Asn Phe Pro
      50             55             60
Tyr Lys Tyr Ser Ala Asn Asn Leu Glu Val Tyr Lys Gly Lys Ser Glu
      65             70             75             80
Gly Ser Thr Gln Pro Ser Cys Pro Thr Phe Thr Leu Thr Gly Asn Gln
      85             90             95
Leu Leu Val Val Leu Val Gly Pro Ser Arg His Phe Met Cys Ala Phe
      100            105            110
Thr Asn Ile Met His Ser Tyr Val Phe Leu Lys Gly Lys Gln Arg Pro
      115            120            125
Gly Ala Val Ala Asp Ala Cys Asn Pro Ser Thr Leu Gly Gly Arg Gly
      130            135            140
Gly Arg Ile Thr Arg Ser Gly Asp Gly Asp His Pro Gly
      145            150            155

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<210> 4072

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4072

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Met Ser Arg Trp Leu Trp Pro Trp Ser Asn Cys Val Lys Glu Arg Val

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1 5 10 15
 Cys Arg Tyr Leu Leu His His Tyr Leu Gly His Phe Phe Gln Glu His
 20 25 30
 Leu Ser Leu Asp Gln Leu Ser Leu Asp Leu Tyr Lys Gly Ser Val Ala
 35 40 45
 Leu Arg Asp Ile His Leu Glu Ile Trp Val Arg Ser Gln Ala Arg Val
 50 55 60
 Gln Glu Val Cys Glu Arg Gly Ala Gly Val Asn Gly Val Thr Ala Gly
 65 70 75 80
 Ala Gly Gly Arg Leu Arg Gly Leu His Arg Gly Gly Arg Ala Leu Gly
 85 90 95
 Cys Ser Ala His Arg Pro Leu His Ser Ala Arg Val Arg Pro Pro Ala
 100 105 110
 His Leu Ala Ala Pro Pro Gly Ser Arg
 115 120

<210> 4073

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4073

Met Arg Ser Leu Leu Ile Leu Ser Trp Asp Ser Trp Ser Ile Ala Phe
 1 5 10 15
 Leu Ala Gly Asn Leu Cys Gly Gln Trp His Leu Cys Pro Ser Phe Ala
 20 25 30
 Trp Ala Ser Arg Ser Arg His Arg Cys Leu Leu Pro Ala Arg Leu Gln
 35 40 45
 Leu Asp Gln Val Tyr Cys Lys Gln Ala Ala Ser Thr Ala Gly Thr Gly
 50 55 60
 Glu His Gly Gly Gly Gln Lys Leu Gly Asp Thr Arg Asn Cys Arg Ala
 65 70 75 80
 Pro Lys Arg Val Ser Gln Ala Cys Ile Arg Asn Leu Leu Gly Leu Gly
 85 90 95
 Ser Leu Lys Gly His Ser Ser Ser Leu Leu Leu Ser Ser Leu Leu Leu

100 105 110
 Val Thr Arg Asn Val Ala Ser Lys Gly Cys Val Ser Ala Leu Phe Val
 115 120 125
 Leu

<210> 4074

<211> 226

<212> PRT

<213> Homo sapiens

<400> 4074

Met Ala Asp Leu Leu Pro Phe Ala Val Pro Thr Lys Ser Asp Lys Thr
 1 5 10 15
 Leu Leu Val Trp Glu Leu Ser Ser Gly Pro Thr Ala Asp Ala Leu Tyr
 20 25 30
 Arg Gln Gly Leu Ala Val Leu Leu Met Leu Val Leu Asn Ser Trp Pro
 35 40 45
 Gln Ala Ile Leu Pro Ser Trp Pro Pro Arg Glu Gln Asp Tyr Arg Leu
 50 55 60
 Phe Leu Leu Glu Val Val Gln Glu Val Glu Glu Ser Thr Ser Asp Glu
 65 70 75 80
 Gln Ile Ala Gly Gly Cys Ser His Ser His Val Ser Ala Lys Lys Ser
 85 90 95
 Glu Phe Ser Ser His Gln Asn Gln Gly Lys Asp Asn Ala Ala Val Met
 100 105 110
 Val Gln Ser Cys Leu Glu Gly Glu Thr Ala Leu Val Phe Pro Ala Leu
 115 120 125
 Glu Ile Asn Val Val Pro Leu Asn His Lys Asp Cys Pro Trp Gly Glu
 130 135 140
 Glu Gln Arg Pro Gly Trp Thr Gly Asp His Ala Arg Ser Arg Ala Leu
 145 150 155 160
 Gln Lys Cys Gln Ser Glu Gly Ser Gly His Arg Leu Gly Pro Phe Gly
 165 170 175
 Met Met Gly Lys Phe Ala Lys Val Arg Arg Gln Glu Leu Gly Ser Ser

180 185 190
 Leu Lys Gln Arg Gly Phe Gln Ala Ala Glu Glu Pro Glu Asp Pro Ala
 195 200 205
 Ser Ala Pro Asp Thr Val Leu Asp His Leu Phe Pro Phe Pro Ser Cys
 210 215 220
 Leu Phe
 225

<210> 4075

<211> 362

<212> PRT

<213> Homo sapiens

<400> 4075

Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu Asn Ser Arg Lys Ala
 1 5 10 15
 Arg Glu Trp Thr Pro Arg Asp Ile Glu Ala Gln Thr Gln Lys Pro Glu
 20 25 30
 Pro Pro Glu Ser Ala Glu Lys Leu Leu Glu Ser Pro Gly Val Glu Ala
 35 40 45
 Gly Glu Gly Glu Ala Glu Lys Glu Glu Ala Gly Ala Gln Gly Arg Pro
 50 55 60
 Leu Arg Ala Leu Gln Asn Cys Cys Ser Val Pro Ser Pro Leu Pro Pro
 65 70 75 80
 Glu Asp Ala Gly Thr Gly Gly Leu Arg Gln Gln Glu Glu Glu Ala Val
 85 90 95
 Glu Leu Gln Pro Pro Pro Pro Ala Pro Leu Ser Pro Pro Pro Pro Ala
 100 105 110
 Pro Thr Ala Pro Gln Pro Pro Gly Asp Pro Leu Met Ser Arg Leu Phe
 115 120 125
 Tyr Gly Val Lys Ala Gly Pro Gly Val Gly Ala Pro Arg Arg Ser Gly
 130 135 140
 His Thr Phe Thr Val Asn Pro Arg Arg Ser Val Pro Pro Ala Thr Pro
 145 150 155 160
 Ala Thr Pro Thr Ser Pro Ala Thr Val Asp Ala Ala Val Pro Gly Ala

	165		170		175										
Gly	Lys	Lys	Arg	Tyr	Pro	Thr	Ala	Glu	Glu	Ile	Leu	Val	Leu	Gly	Gly
	180		185		190										
Tyr	Leu	Arg	Leu	Ser	Arg	Ser	Cys	Leu	Ala	Lys	Gly	Ser	Pro	Glu	Arg
	195		200		205										
His	His	Lys	Gln	Leu	Lys	Ile	Ser	Phe	Ser	Glu	Thr	Ala	Leu	Glu	Thr
	210		215		220										
Thr	Tyr	Gln	Tyr	Pro	Ser	Glu	Ser	Ser	Val	Leu	Glu	Arg	Arg	Arg	Ala
225			230		235										
Lys	Leu	Gly	Leu	Ser	Pro	Gly	Glu	Pro	Ser	Pro	Val	Leu	Gly	Thr	Val
	245		250		255										
Glu	Ala	Gly	Pro	Pro	Asp	Pro	Asp	Glu	Ser	Ala	Val	Leu	Leu	Glu	Ala
	260		265		270										
Ile	Gly	Pro	Val	His	Gln	Asn	Arg	Phe	Ile	Arg	Gln	Glu	Arg	Gln	Gln
	275		280		285										
Gln	Gln	Gln	Gln	Gln	Gln	Arg	Ser	Glu	Glu	Leu	Leu	Ala	Glu	Arg	Lys
	290		295		300										
Pro	Gly	Pro	Leu	Glu	Ala	Arg	Glu	Arg	Arg	Pro	Ser	Pro	Gly	Glu	Met
305			310		315										
Arg	Asp	Gln	Ser	Pro	Lys	Gly	Arg	Glu	Ser	Arg	Glu	Glu	Asp	Glu	Glu
	325		330		335										
Glu	Leu	Leu	Leu	Leu	Gln	Pro	Glu	Leu	Gln	Gly	Gly	Leu	Arg	Thr	Lys
	340		345		350										
Ala	Leu	Ile	Val	Asp	Glu	Ser	Cys	Arg	Arg						
	355		360												

<210> 4076

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4076

Met	Pro	Leu	Pro	Ile	Asn	Thr	Ile	Gly	Cys	Leu	Leu	Ser	Tyr	Pro	Lys
1				5				10					15		
Pro	Phe	Asp	Thr	Ala	His	Trp	Lys	Met	Glu	Phe	Met	Leu	Leu	His	Gly

20 25 30
 Leu Gly Phe Ala Thr Cys Leu Thr Phe Thr Val Ser Met Leu Pro Asn
 35 40 45
 Ser Gly Ala Gly Ala Pro Ala Ser Leu His Pro Pro Pro Phe Cys Ile
 50 55 60
 Arg Gln Gly Ile Ser Ser Pro Thr Pro Thr Ala Ser Leu Pro Lys Cys
 65 70 75 80
 Leu His Cys Gln Leu Lys Leu Pro Ala Ala His Phe Asn Pro Ala Leu
 85 90 95
 Thr Gly Thr Trp Lys Ser Ser His His Thr Ser Ile Phe Pro Ser Thr
 100 105 110
 Ser Leu Phe
 115

<210> 4077

<211> 515

<212> PRT

<213> Homo sapiens

<400> 4077

Met Val Leu Ser Gln Glu Glu Pro Asp Ser Ala Arg Gly Thr Ser Glu
 1 5 10 15
 Ala Gln Pro Leu Gly Pro Ala Pro Thr Gly Ala Ala Pro Pro Pro Gly
 20 25 30
 Pro Gly Pro Ser Asp Ser Pro Glu Ala Ala Val Glu Lys Val Glu Val
 35 40 45
 Glu Leu Ala Gly Pro Ala Thr Ala Glu Pro His Glu Pro Pro Glu Pro
 50 55 60
 Pro Glu Gly Gly Trp Gly Trp Leu Val Met Leu Ala Ala Met Trp Cys
 65 70 75 80
 Asn Gly Ser Val Phe Gly Ile Gln Asn Ala Cys Gly Val Leu Phe Val
 85 90 95
 Ser Met Leu Glu Thr Phe Gly Ser Lys Asp Asp Asp Lys Met Val Phe
 100 105 110
 Lys Thr Ala Trp Val Gly Ser Leu Ser Met Gly Met Ile Phe Phe Cys

115	120	125
Cys Pro Ile Val Ser Val Phe Thr Asp Leu Phe Gly Cys Arg Lys Thr		
130	135	140
Ala Val Val Gly Ala Ala Val Gly Phe Val Gly Leu Met Ser Ser Ser		
145	150	155
Phe Val Ser Ser Ile Glu Pro Leu Tyr Leu Thr Tyr Gly Ile Ile Phe		
165	170	175
Ala Cys Gly Cys Ser Phe Ala Tyr Gln Pro Ser Leu Val Ile Leu Gly		
180	185	190
His Tyr Phe Lys Lys Arg Leu Gly Leu Val Asn Gly Ile Val Thr Ala		
195	200	205
Gly Ser Ser Val Phe Thr Ile Leu Leu Pro Leu Leu Leu Arg Val Leu		
210	215	220
Ile Asp Ser Val Gly Leu Phe Tyr Thr Leu Arg Val Leu Cys Ile Phe		
225	230	235
Met Phe Val Leu Phe Leu Ala Gly Phe Thr Tyr Arg Pro Leu Ala Thr		
245	250	255
Ser Thr Lys Asp Lys Glu Ser Gly Gly Ser Gly Ser Ser Leu Phe Ser		
260	265	270
Arg Lys Lys Phe Ser Pro Pro Lys Lys Ile Phe Asn Phe Ala Ile Phe		
275	280	285
Lys Val Thr Ala Tyr Ala Val Trp Ala Val Gly Ile Pro Leu Ala Leu		
290	295	300
Phe Gly Tyr Phe Val Pro Tyr Val His Leu Met Lys His Val Asn Glu		
305	310	315
Arg Phe Gln Asp Glu Lys Asn Lys Glu Val Val Leu Met Cys Ile Gly		
325	330	335
Val Thr Ser Gly Val Gly Arg Leu Leu Phe Gly Arg Ile Ala Asp Tyr		
340	345	350
Val Pro Gly Val Lys Lys Val Tyr Leu Gln Val Leu Ser Phe Phe Phe		
355	360	365
Ile Gly Leu Met Ser Met Met Ile Pro Leu Cys Ser Ile Phe Gly Ala		
370	375	380
Leu Ile Ala Val Cys Leu Ile Met Gly Leu Phe Asp Gly Cys Phe Ile		
385	390	395
Ser Ile Met Ala Pro Ile Ala Phe Glu Leu Val Gly Ala Gln Asp Val		

405 410 415
 Ser Gln Ala Ile Gly Phe Leu Leu Gly Phe Met Ser Ile Pro Met Thr
 420 425 430
 Val Gly Pro Pro Ile Ala Gly Leu Leu Arg Asp Lys Leu Gly Ser Tyr
 435 440 445
 Asp Val Ala Phe Tyr Leu Ala Gly Val Pro Pro Leu Ile Gly Gly Ala
 450 455 460
 Val Leu Cys Phe Ile Pro Trp Ile His Ser Lys Lys Gln Arg Glu Ile
 465 470 475 480
 Ser Lys Thr Thr Gly Lys Glu Lys Met Glu Lys Met Leu Glu Asn Gln
 485 490 495
 Asn Ser Leu Leu Ser Ser Ser Ser Gly Met Phe Lys Lys Glu Ser Asp
 500 505 510
 Ser Ile Ile
 515

<210> 4078

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4078

Met Gly Trp Gly Gly Val Gly Gln Met Glu Gln Gln Pro Gly Glu Arg
 1 5 10 15
 Val Asp Leu Gln Thr Thr Gln Gln Ala Leu Ala Val Ser Ser Met Arg
 20 25 30
 Asn Arg Arg Asp Ile His Gly Thr Pro Cys Arg Lys Glu Glu Glu Glu
 35 40 45
 Lys Ser Tyr Leu Leu Gly Pro Tyr Pro Gly Lys Phe Pro Thr Leu Val
 50 55 60
 Leu Phe Thr Gly Cys Cys Pro Glu Arg Gln Ile Leu Ser Ser Pro Ser
 65 70 75 80
 His Glu Arg Gly Asn Gln Gly Cys Lys Gln Glu Ser Asp Ser Ala Lys
 85 90 95
 Val Thr Gln Leu Glu Ser Gly Arg Asp Gly Thr Gln His Asp Ile Ser

100 105 110
 Leu Gln Ser Trp Gln Leu Leu Arg Ala Leu Pro Leu Leu Asn Arg Asp
 115 120 125
 Leu Pro Gly Met Thr Arg Arg Pro Ser Gly Phe Ser Gly Leu Val Leu
 130 135 140
 Arg Thr Phe Ile Arg Phe Phe Ser Lys Tyr Leu Leu Ser Ala Thr Val
 145 150 155 160
 Cys Gln Ala Leu Phe
 165

<210> 4079

<211> 272

<212> PRT

<213> Homo sapiens

<400> 4079

Met Gln Ser Asn Met Thr Asn Thr Val Val Arg Thr Thr Leu Arg Asn
 1 5 10 15
 Asp Leu Ser Gln Glu Gly Ile Ile His His Leu Lys Ile Leu Ser Pro
 20 25 30
 Ile Tyr Cys Ala Phe Gln Asn Asp Leu Leu Thr Ser Ser Gly Phe Thr
 35 40 45
 Leu Glu Trp Gly Val Tyr Thr Ile Ile Glu Asp Leu His Gly Ala Gly
 50 55 60
 Asn Phe Val Thr Glu Met Gln Leu Phe Ile Gly Asp Ser Pro Ile Pro
 65 70 75 80
 Gln Asn Tyr Ser Val Ser Ala Ser Asp Asp Val Arg Ile Glu Val Gly
 85 90 95
 Leu Tyr Arg Gln Lys Ser Asn Leu Lys Val Val Leu Thr Glu Cys Trp
 100 105 110
 Ala Thr Pro Ser Ser Asn Ala Arg Asp Pro Ile Thr Phe Ser Phe Ile
 115 120 125
 Asn Asn Ser Cys Pro Val Pro Asn Thr Tyr Thr Asn Val Ile Glu Asn
 130 135 140
 Gly Asn Ser Asn Lys Ala Gln Phe Lys Leu Arg Ile Phe Ser Phe Ile

145 150 155 160
 Asn Asn Ser Ile Val Tyr Leu His Cys Lys Leu Arg Val Cys Met Glu
 165 170 175
 Ser Pro Gly Ala Thr Cys Lys Ile Asn Cys Asn Asn Phe Arg Leu Leu
 180 185 190
 Gln Asn Ser Glu Thr Ser Ala Thr His Gln Met Ser Trp Gly Pro Leu
 195 200 205
 Ile Arg Ser Glu Gly Glu Pro Pro His Ala Glu Ala Gly Leu Gly Ala
 210 215 220
 Gly Tyr Val Val Leu Ile Val Val Ala Ile Phe Val Leu Val Ala Gly
 225 230 235 240
 Thr Ala Thr Leu Leu Ile Val Arg Tyr Gln Arg Met Asn Gly Arg Tyr
 245 250 255
 Asn Phe Lys Ile Gln Ser Asn Asn Phe Ser Tyr Gln Val Phe Tyr Glu
 260 265 270

<210> 4080

<211> 133

<212> PRT

<213> Homo sapiens

<400> 4080

Met Ala Gly Ala Gly Val Gly Gly Trp Val Pro Gly Ala Trp Leu Gln
 1 5 10 15
 Gly Cys Pro Ser Val Leu Arg Pro Leu Val Ser Leu Pro Ser Ser Ser
 20 25 30
 Pro Thr Leu Glu Phe Leu Leu Phe Leu Ile Leu Val Met Phe Leu Gly
 35 40 45
 Phe Ile Val Leu Leu Leu Arg Glu Val Lys Leu His His Gln Asp Trp
 50 55 60
 Ile Ala Phe Ala Phe Gln Leu Phe Ile His Pro Leu Ala Trp Thr Arg
 65 70 75 80
 Thr Arg Ala Gly Ile Phe Gly Cys Phe Arg Phe Ala Arg Cys Ser Ile
 85 90 95
 Phe Ala Gln Val Leu Arg Leu Glu Met His Phe Lys Leu Ser Arg Leu

100	105	110
Ala Gly Lys Met Gln Asp Ala	Leu Trp Leu His Lys Cys Cys Thr Ser	
115	120	125
Gly Val Gly Ala Gly		
130		

<210> 4081

<211> 566

<212> PRT

<213> Homo sapiens

<400> 4081

Met Val Arg Glu Lys Tyr Ile Arg Pro Leu Thr Thr Glu Glu Trp Val			
1	5	10	15
Glu Lys Met Met Asp Ala Asp Pro Glu Phe Pro Pro Asp Phe Ala Glu			
20	25	30	
Ala Phe Glu Ser Gln Leu Ser Leu Ser Asp Ser Pro Ser Leu Cys Arg			
35	40	45	
Pro Val Tyr Ser Lys Lys Gly Leu Glu His Lys Ala Asp Leu Gln Gln			
50	55	60	
His Leu Phe Pro Val Pro Pro Gly His Leu Glu Cys Thr Pro Glu Ser			
65	70	75	80
Leu Trp Lys Glu Leu Ser Leu Gln His Glu Gly Leu Lys Glu Leu Ile			
85	90	95	
His Lys Gln Met Arg Pro Phe Ser Gln Gly Ile Val Ile Leu Ser Arg			
100	105	110	
Ser Trp Ala Val Asp Leu Asn Leu Gln Glu Lys Pro Gly Val Ile Cys			
115	120	125	
Asp Ala Leu Leu Ile Ala Gln Asn Ser Thr Pro Ile Leu Tyr Thr Ile			
130	135	140	
Leu Arg Glu Gln Asp Ala Glu Gly Gln Asp Tyr Cys Thr Arg Thr Ala			
145	150	155	160
Phe Thr Leu Lys Gln Lys Leu Val Asn Met Gly Gly Tyr Thr Gly Lys			
165	170	175	
Val Cys Val Arg Ala Lys Val Leu Cys Leu Ser Pro Glu Ser Ser Thr			

180	185	190
Glu Ala Leu Glu Ala Ala Val	Ser Pro Met Asp Tyr	Pro Ala Ser Tyr
195	200	205
Ser Leu Ala Gly Thr Gln His	Met Glu Ala Leu Leu	Gln Ser Leu Val
210	215	220
Ile Val Leu Leu Gly Phe Arg	Ser Leu Leu Ser Asp	Gln Leu Gly Cys
225	230	235
Glu Val Leu Asn Leu Leu Thr	Ala Gln Gln Tyr Glu	Ile Phe Ser Arg
245	250	255
Ser Leu Arg Lys Asn Arg Glu	Leu Phe Val His Gly	Leu Pro Gly Ser
260	265	270
Gly Lys Thr Ile Met Ala Met	Lys Ile Met Glu Lys	Ile Arg Asn Val
275	280	285
Phe His Cys Glu Ala His Arg	Ile Leu Tyr Val Cys	Glu Asn Gln Pro
290	295	300
Leu Arg Asn Phe Ile Ser Val	Arg Asn Ile Cys Arg	Ala Glu Thr Arg
305	310	315
Lys Thr Phe Leu Arg Glu Lys	Phe Glu His Ile Gln	His Ile Val Ile
325	330	335
Asp Glu Ala Gln Asn Phe Arg	Thr Glu Asp Gly Asp	Trp Tyr Arg Lys
340	345	350
Ala Lys Thr Ile Thr Gln Arg	Glu Lys Asp Cys Pro	Gly Val Leu Trp
355	360	365
Ile Phe Leu Asp Tyr Phe Gln	Thr Ser His Leu Gly	His Ser Gly Leu
370	375	380
Pro Pro Leu Ser Ala Gln Tyr	Pro Arg Glu Glu Leu	Thr Arg Val Val
385	390	395
Arg Asn Ala Asp Glu Ile Ala	Glu Tyr Ile Gln Gln	Glu Met Gln Leu
405	410	415
Ile Ile Glu Asn Pro Pro Ile	Asn Ile Pro His Gly	Tyr Leu Ala Ile
420	425	430
Leu Ser Glu Ala Lys Trp Val	Pro Gly Val Pro Gly	Asn Thr Lys Ile
435	440	445
Ile Lys Asn Phe Thr Leu Glu	Gln Ile Val Thr Tyr	Val Ala Asp Thr
450	455	460

Cys Arg Cys Phe Phe Glu Arg Gly Tyr Ser Pro Lys Asp Val Ala Val
 465 470 475 480
 Leu Val Ser Thr Val Thr Glu Val Glu Gln Tyr Gln Ser Lys Leu Leu
 485 490 495
 Lys Ala Met Arg Lys Lys Met Val Val Gln Leu Ser Asp Ala Cys Asp
 500 505 510
 Met Leu Gly Val His Ile Val Leu Asp Ser Val Arg Arg Phe Ser Gly
 515 520 525
 Leu Glu Arg Ser Ile Val Phe Gly Ile His Pro Arg Thr Ala Asp Pro
 530 535 540
 Ala Ile Leu Pro Asn Ile Leu Ile Cys Leu Ala Ser Arg Ala Lys Gln
 545 550 555 560
 His Leu Tyr Ile Phe Leu
 565

<210> 4082

<211> 208

<212> PRT

<213> Homo sapiens

<400> 4082

Met Leu Met Leu Phe Val Phe Gly Val Leu Leu His Glu Val Ser Leu
 1 5 10 15
 Ser Gly Gln Asn Glu Ala Pro Pro Asn Thr His Ser Ile Pro Gly Glu
 20 25 30
 Pro Leu Tyr Asn Tyr Ala Ser Ile Arg Leu Pro Glu Glu His Ile Pro
 35 40 45
 Phe Phe Leu His Asn Asn Arg His Ile Ala Thr Val Cys Arg Lys Asp
 50 55 60
 Ser Leu Cys Pro Tyr Lys Lys His Leu Glu Lys Leu Lys Tyr Cys Trp
 65 70 75 80
 Gly Tyr Glu Lys Ser Cys Lys Pro Glu Phe Arg Phe Gly Tyr Pro Val
 85 90 95
 Cys Ser Tyr Val Asp Met Gly Trp Thr Asp Thr Leu Glu Ser Ala Glu
 100 105 110

Asp Ile Phe Trp Lys Gln Ala Asp Phe Gly Tyr Ala Arg Glu Arg Leu
 115 120 125
 Glu Glu Met His Val Leu Cys Gln Pro Lys Glu Thr Ser Asp Ser Ser
 130 135 140
 Leu Val Cys Ser Arg Tyr Leu Gln Tyr Cys Arg Ala Thr Asn Leu Tyr
 145 150 155 160
 Leu Asp Leu Arg Asn Ile Lys Arg Asn His Asp Arg Phe Lys Glu Asp
 165 170 175
 Phe Phe Gln Ser Gly Glu Ile Gly Gly His Cys Lys Leu Asp Ile Arg
 180 185 190
 Thr Leu Thr Ser Glu Gly Arg Arg Lys Ser Pro Leu Gln Ser Trp Cys
 195 200 205

<210> 4083

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4083

Met Cys Arg Arg Val Leu Ser Gln Ala Val Trp Gly Ser Tyr Gly Pro
 1 5 10 15
 Ser Pro Glu Pro Tyr Pro Thr Trp Ser Leu Gly Asp Gly Gln Gln Val
 20 25 30
 Pro Gly His Cys Gly Val Cys Gln Leu Leu Gly Ser Phe Pro Gly Met
 35 40 45
 Pro Leu Gly Ala Trp Glu Arg Trp Ser Gly Trp Ala Val Phe Pro Ala
 50 55 60
 Ala Gly Ser Gly Leu Gly Glu Ala Ala Trp Val Gly Leu Pro Ser Asp
 65 70 75 80
 Pro Gly Leu Ser Arg Cys Arg Phe Gly Ile Gly Arg Gly Gly Met Gly
 85 90 95
 Gly Pro Pro Ser Arg His Arg Ile Phe Pro Ala Ala Ser Ser Gly Pro
 100 105 110
 Gly Glu Ala Ala Trp Val Gly Leu Pro Pro Asp Thr Gly Ser Phe Leu
 115 120 125

Leu Gln Val Trp Asp Gln Glu Arg Arg His Gly Trp Ala Ser Leu Leu
 130 135 140
 Thr Gln Val Ser Pro Ala Ala Gly Ser Gly Leu Gly Glu Ala Met Trp
 145 150 155 160
 Val Gly Leu Thr Gln Gly Leu Ser Gly Cys Arg Phe Arg Thr Gly Arg
 165 170 175
 Gly Gly Val Gly Gly Pro Pro Ser
 180

<210> 4084

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4084

Met Tyr Val Cys Leu Tyr Glu Thr Phe Ser Ser Leu Phe Ser Leu Leu
 1 5 10 15
 Arg Glu Lys Ile Ser Leu Asn Cys Phe Ser Phe Ser Phe Leu Val Glu
 20 25 30
 Tyr His Leu His Pro Leu Phe Leu Ile Ala Ser Leu Pro Met Phe Phe
 35 40 45
 Pro Gln Lys Ser Leu Phe Asp Ile Ile Ser Lys Ile Asp Leu Met Val
 50 55 60
 Asn Ser Gly Lys Leu Gly Thr Thr Val Lys Pro Lys Ser Leu Val Thr
 65 70 75 80
 Ser Ser Ser Gly Ala Leu Lys Lys Gln His Lys Lys Pro Phe Asp Ala
 85 90 95
 Met Asn Asn Ile Val Ala Asn Leu Leu Leu Asn Leu Thr Arg
 100 105 110

<210> 4085

<211> 329

<212> PRT

<213> Homo sapiens

<400> 4085

Met Leu Pro Leu Glu Pro Tyr Leu Thr Gln Thr Ser Ala Val Pro Gln
 1 5 10 15
 Met Ser His Phe Met Cys His Ser Pro Thr His Lys Pro Gln Gly Leu
 20 25 30
 Leu Pro Trp Ala Pro Phe His Gln Ala Ser Val Ser Leu Tyr Pro Ile
 35 40 45
 Ser Pro Trp Pro Ser Glu Ser Val Cys Pro Pro Thr Cys Pro Gly Gly
 50 55 60
 Ala Ser Cys Trp Phe Pro Ala Gly Asn Ala Trp Asp Arg Val Glu Leu
 65 70 75 80
 Gly Phe Leu Gly Phe Gly Ala Gly Gly Val Ser Ile Ala Val Pro Gly
 85 90 95
 Phe Pro Leu Ser Cys Gly Gln Gly Cys Cys Ala Gly Gly Trp Leu Gly
 100 105 110
 His Gly Ala Arg Phe Pro Ala Lys Leu Arg Ala Phe Pro Gln Val Ile
 115 120 125
 Arg Arg Gly Trp Leu Thr Ile Asn Asn Ile Ser Leu Met Lys Gly Gly
 130 135 140
 Ser Lys Glu Tyr Trp Phe Val Leu Thr Ala Glu Ser Leu Ser Trp Tyr
 145 150 155 160
 Lys Asp Glu Glu Glu Lys Glu Lys Lys Tyr Met Leu Pro Leu Asp Asn
 165 170 175
 Leu Lys Ile Arg Asp Val Glu Lys Gly Phe Met Ser Asn Lys His Val
 180 185 190
 Phe Ala Ile Phe Asn Thr Glu Gln Arg Asn Val Tyr Lys Asp Leu Arg
 195 200 205
 Gln Ile Glu Leu Ala Cys Asp Ser Gln Glu Asp Val Asp Ser Trp Lys
 210 215 220
 Ala Ser Phe Leu Arg Ala Gly Val Tyr Pro Glu Lys Asp Gln Val Arg
 225 230 235 240
 Ser Arg Pro Ala Gln Pro Gly Pro Glu Pro Pro Pro Gly Arg Gly Ser
 245 250 255
 Arg Ala Gly Phe Pro Gln Asp Arg Ser Phe Ser Gly His Val Ser Arg

260 265 270
 Glu Ser Leu Lys Ser Cys Ser Arg Cys Pro Leu Glu Gln Ala Lys Glu
 275 280 285
 Lys Leu Gly Val Leu Cys His Gln Gly Pro Glu Ser Ser Leu Thr Glu
 290 295 300
 Ala Ser Asp Arg Gly Thr Gln Gly Met Gly Ser His Leu Leu Cys Ser
 305 310 315 320
 Pro Leu Phe Ser Pro Ser Ile Leu Arg
 325

<210> 4086

<211> 550

<212> PRT

<213> Homo sapiens

<400> 4086

Met Tyr Ser Thr Asp Glu Asn Leu Ile Leu Ser Pro Leu Leu Gly Asn
 1 5 10 15
 Val Cys Phe Ser Ser Ser Gln Tyr Ser Ile Cys Phe Thr Leu Gly Ser
 20 25 30
 Phe Ala Lys Ile Tyr Ala Asp Thr Phe Gly Asp Ile Asn Tyr Gln Glu
 35 40 45
 Phe Ala Lys Arg Leu Trp Gly Asp Ile Tyr Phe Asn Pro Lys Thr Arg
 50 55 60
 Lys Phe Thr Lys Lys Ala Pro Thr Ser Ser Ser Gln Arg Ser Phe Val
 65 70 75 80
 Glu Phe Ile Leu Glu Pro Leu Tyr Lys Ile Leu Ala Gln Val Val Gly
 85 90 95
 Asp Val Asp Thr Ser Leu Pro Arg Thr Leu Asp Glu Leu Gly Ile His
 100 105 110
 Leu Thr Lys Glu Glu Leu Lys Leu Asn Ile Arg Pro Leu Leu Arg Leu
 115 120 125
 Val Cys Lys Lys Phe Phe Gly Glu Phe Thr Gly Phe Val Asp Met Cys
 130 135 140
 Val Gln His Ile Pro Ser Pro Lys Val Gly Ala Lys Pro Lys Ile Glu

145	150	155	160
His Thr Tyr Thr Gly Gly Val Asp Ser Asp Leu Gly Glu Ala Met Ser			
165	170	175	
Asp Cys Asp Pro Asp Gly Pro Leu Met Cys His Thr Thr Lys Met Tyr			
180	185	190	
Ser Thr Asp Asp Gly Val Gln Phe His Ala Phe Gly Arg Val Leu Ser			
195	200	205	
Gly Thr Ile His Ala Gly Gln Pro Val Lys Val Leu Gly Glu Asn Tyr			
210	215	220	
Thr Leu Glu Asp Glu Glu Asp Ser Gln Ile Cys Thr Val Gly Arg Leu			
225	230	235	240
Trp Ile Ser Val Ala Arg Tyr His Ile Glu Val Asn Arg Val Pro Ala			
245	250	255	
Gly Asn Trp Val Leu Ile Glu Gly Val Asp Gln Pro Ile Val Lys Thr			
260	265	270	
Ala Thr Ile Thr Glu Pro Arg Gly Asn Glu Glu Ala Gln Ile Phe Arg			
275	280	285	
Pro Leu Lys Phe Asn Thr Thr Ser Val Ile Lys Ile Ala Val Glu Pro			
290	295	300	
Val Asn Pro Ser Glu Leu Pro Lys Met Leu Asp Gly Leu Arg Lys Val			
305	310	315	320
Asn Lys Ser Tyr Pro Ser Leu Thr Thr Lys Val Glu Glu Ser Gly Glu			
325	330	335	
His Val Ile Leu Gly Thr Gly Glu Leu Tyr Leu Asp Cys Val Met His			
340	345	350	
Asp Leu Arg Lys Met Tyr Ser Glu Ile Asp Ile Lys Val Ala Asp Pro			
355	360	365	
Val Val Thr Phe Cys Glu Thr Val Val Glu Thr Ser Ser Leu Lys Cys			
370	375	380	
Phe Ala Glu Thr Pro Asn Lys Lys Asn Lys Ile Thr Met Ile Ala Glu			
385	390	395	400
Pro Leu Glu Lys Gly Leu Ala Glu Asp Ile Glu Asn Glu Val Val Gln			
405	410	415	
Ile Thr Trp Asn Arg Lys Lys Leu Gly Glu Phe Phe Gln Thr Lys Tyr			
420	425	430	
Asp Trp Asp Leu Leu Ala Ala Arg Ser Ile Trp Ala Phe Gly Pro Asp			

435 440 445
 Ala Thr Gly Pro Asn Ile Leu Val Asp Asp Thr Leu Pro Ser Glu Val
 450 455 460
 Asp Lys Ala Leu Leu Gly Ser Val Lys Asp Ser Ile Val Gln Gly Phe
 465 470 475 480
 Gln Trp Gly Thr Arg Glu Gly Pro Leu Cys Asp Glu Cys Lys Ser Thr
 485 490 495
 Ser Thr Pro Pro Pro Gln Ser Ser Arg Val Leu Ala Ala Arg His Met
 500 505 510
 Ser Gly Met Gly Ser Pro Ser Leu Gly Phe Gly Arg Arg Ser Ser Leu
 515 520 525
 Gly Tyr Thr Gly Pro Ser Gln Val Leu Gly Gln Leu Leu Pro Phe Ser
 530 535 540
 Phe Leu Ile Leu Val Val
 545 550

<210> 4087

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4087

Met Pro Arg Gly Val Gln Ile Lys Lys Arg Ala Cys Ala Gln Met Trp
 1 5 10 15
 Ala Gln Val Ser Gln Arg Gly Lys Ser Ser Phe Trp Pro Ser Leu Gln
 20 25 30
 His Ala Leu Gly Pro Ser Asn Ile Phe Lys Ile Arg Lys Glu Leu Phe
 35 40 45
 Ser Ser His Gln Tyr Leu Leu Cys Phe Gln Thr Ile Phe Phe Ala Asn
 50 55 60
 Leu Pro Cys Gln Cys Ser Val Pro Pro Cys Pro His Thr Ser Ser Ala
 65 70 75 80
 Gly Arg Ala Ala Leu Glu Thr Val Leu Ser Ile Pro Cys Gly Glu Arg
 85 90 95
 Gly Thr Ala Ala Pro Ala Thr Arg

100

<210> 4088

<211> 109

<212> PRT

<213> Homo sapiens

<400> 4088

Met Ala Leu Cys Asp Cys Gly Ser Pro Ser Ser Asn Gly Pro Ser Leu
 1 5 10 15
 Ser Tyr Phe Gln Tyr Ser Leu Pro Thr Pro Lys Gly Gly Lys Tyr Ala
 20 25 30
 Ile Asn Pro His Leu Thr Glu Asp Gln Arg Phe Pro Gln Leu Arg Leu
 35 40 45
 Ser Gln Lys Ala Arg Gln Lys Thr Asn Val Phe Ala Pro Asp Phe Ile
 50 55 60
 Ala Gly Val Ser Pro Phe Val Glu Asn Asp Ile Ser Ser Arg Ser Ala
 65 70 75 80
 Thr Leu Gln Val Arg Asp Ser Thr Leu Gly Ala Gly Arg Arg Arg Leu
 85 90 95
 Asn Pro Asn Ala Ser Arg Lys Lys Phe Val Lys Lys Arg
 100 105

<210> 4089

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4089

Met Asn Cys Thr Ala Pro Pro Gly Arg Gly Met Trp His Ala Ala Trp
 1 5 10 15
 Gln Leu Ser Leu Gly Leu Gly Ser Ala Gly Ile Ala Gly Val Val Ala
 20 25 30
 Leu Pro Ala Ala Pro Gly Arg Pro Arg Pro Gly Gln Asp Pro Arg Gly

35 40 45
 Gln Pro Asp Met Pro Arg Leu Gln Cys Leu Pro Arg Ser Leu Leu Ser
 50 55 60
 Ser Ser Gly Gln Gly Gly Arg Gly Leu Ser Gln Gly His Ser Gln Ala
 65 70 75 80
 Glu Cys Arg Asn Ser Leu Leu Lys Gly Ser Cys Ala Ser Val Pro Phe
 85 90 95
 Pro Trp Leu His Thr Gln Phe Leu Cys Ala Leu Ser Phe Phe Phe Phe
 100 105 110
 Phe Pro Gln Thr Trp Ser Arg Ser Val Thr Gln Ala Arg Val Gln
 115 120 125

<210> 4090

<211> 176

<212> PRT

<213> Homo sapiens

<400> 4090

Met Arg Gly Pro His Ser Ser Gln Trp Gly Ser Ile Asp Asp Gly Pro
 1 5 10 15
 Val Ile Ser Gly Phe Pro Leu Lys Gly Ala Leu Phe Gly Thr Phe Phe
 20 25 30
 Tyr Ser Ile Ser Leu Phe Ala Trp Ser His Ile Leu Leu Leu Phe Pro
 35 40 45
 Ala Lys Glu Ser Met Trp Glu Phe Ile Tyr Leu Phe Ile Glu Thr Glu
 50 55 60
 Ser His Ser Val Thr Gln Ala Gly Val Gln Trp Cys Asn Leu Ser Ser
 65 70 75 80
 Leu Gln Pro Pro Pro Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Phe
 85 90 95
 Pro Ser Ser Trp Asn Tyr Arg His Leu Pro Pro Cys Pro Ala Asn Phe
 100 105 110
 Leu Tyr Phe Leu Tyr Phe Phe Phe Phe Leu Arg Trp Ser Leu Ser Val
 115 120 125
 Leu Pro Lys Leu Glu Tyr Ser Gly Val Ile Ser Ala His Cys Asn Phe

130 135 140
 Cys Leu Pro Gly Ser Ser Asn Ser Ser Cys Leu Ser Leu Pro Ser Arg
 145 150 155 160
 Trp Asn Tyr Arg Cys Pro Leu Pro Cys Leu Ala Asn Phe Cys Ile Phe
 165 170 175

<210> 4091

<211> 144

<212> PRT

<213> Homo sapiens

<400> 4091

Met Val Tyr Asn Asn Glu Val Val Gly Lys Gly Arg Asn Glu Val Asn
 1 5 10 15
 Gln Thr Lys Asn Ala Thr Arg His Ala Glu Met Val Ala Ile Asp Gln
 20 25 30
 Val Leu Asp Trp Cys Arg Gln Ser Gly Lys Ser Pro Ser Glu Val Phe
 35 40 45
 Glu His Thr Val Leu Tyr Val Thr Val Glu Pro Cys Ile Met Cys Ala
 50 55 60
 Ala Ala Leu Arg Leu Met Lys Ile Pro Leu Val Val Tyr Gly Cys Gln
 65 70 75 80
 Asn Glu Arg Phe Gly Gly Cys Gly Ser Val Leu Asn Ile Ala Ser Ala
 85 90 95
 Asp Leu Pro Asn Thr Gly Arg Pro Phe Gln Cys Ile Pro Gly Tyr Arg
 100 105 110
 Ala Glu Glu Ala Val Glu Met Leu Lys Thr Phe Tyr Lys Gln Glu Asn
 115 120 125
 Pro Asn Ala Pro Lys Ser Lys Val Arg Lys Lys Glu Cys Gln Lys Ser
 130 135 140

<210> 4092

<211> 176

<212> PRT

<213> Homo sapiens

<400> 4092

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Met Glu Asn Gly Gln Ile Thr Pro Asp Gly Phe Leu Ser Lys Ser Ala
 1             5             10             15
Pro Ser Glu Leu Ile Asn Met Thr Gly Asp Leu Met Pro Pro Asn Gln
      20             25             30
Val Asp Ser Leu Ser Asp Asp Phe Thr Ser Leu Ser Lys Asp Gly Leu
      35             40             45
Ile Gln Lys Pro Gly Ser Asn Ala Phe Val Gly Gly Ala Lys Asn Cys
      50             55             60
Ser Leu Ser Val Asp Asp Gln Lys Asp Pro Val Ala Ser Thr Leu Gly
      65             70             75             80
Ala Met Pro Asn Thr Leu Gln Ile Thr Pro Ala Met Ala Gln Gly Ile
              85             90             95
Asn Ala Asp Ile Lys His Gln Leu Met Lys Glu Val Arg Lys Phe Gly
      100             105             110
Arg Lys Tyr Glu Arg Ile Phe Ile Leu Leu Glu Glu Val Gln Gly Pro
      115             120             125
Leu Glu Met Lys Lys Gln Phe Val Glu Phe Thr Ile Lys Glu Ala Ala
      130             135             140
Arg Phe Lys Arg Arg Val Leu Ile Gln Tyr Leu Glu Lys Arg His Tyr
      145             150             155             160
Lys Val His Leu Arg Leu Pro Pro Thr Ser Asp Ile Cys Ser Cys Met
              165             170             175

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<210> 4093

<211> 326

<212> PRT

<213> Homo sapiens

<400> 4093

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Met Glu Gly His Val Asp Arg Ser Ser Gln Pro Thr Ala Arg Arg Ile
 1             5             10             15
Ile Asn Ser Asp Pro Val Asp Leu Asp Leu Val Glu Glu Asn Thr Phe

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	20		25		30											
Val	Gly	Pro	Pro	Pro	Ala	Thr	Ser	Ile	Ser	Gly	Gly	Ser	Val	Tyr	Pro	
	35						40					45				
Thr	Glu	Pro	Asn	Cys	Ser	Ser	Ala	Thr	Phe	Thr	Gly	Asn	Leu	Ser	Phe	
	50						55					60				
Leu	Ala	Ser	Leu	Gln	Leu	Ser	Ser	Asp	Val	Ser	Ser	Leu	Ser	Pro	Thr	
	65						70					75			80	
Ser	Asn	Asn	Ser	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Gln	Lys	Ala	Pro
				85								90			95	
Leu	Pro	Cys	Pro	Gln	Gln	Asp	Val	Ser	Arg	Pro	Pro	Gln	Ala	Leu	Pro	
				100								105			110	
Cys	Pro	Leu	Arg	Pro	Leu	Pro	Cys	Pro	Pro	Arg	Ala	Ser	Pro	Cys	Pro	
				115								120			125	
Pro	Arg	Ala	Ser	Ser	Cys	Pro	Pro	Arg	Ala	Leu	Ser	Cys	Pro	Ser	Gln	
				130								135			140	
Thr	Met	Gln	Cys	Gln	Leu	Pro	Ala	Leu	Thr	His	Pro	Pro	Gln	Glu	Val	
				145								150			155	
Pro	Cys	Pro	Arg	Gln	Asn	Ile	Pro	Gly	Pro	Pro	Gln	Asp	Ser	Leu	Gly	
				165								170			175	
Leu	Pro	Gln	Asp	Val	Pro	Gly	Leu	Pro	Gln	Ser	Ile	Leu	His	Pro	Gln	
				180								185			190	
Asp	Val	Ala	Tyr	Leu	Gln	Asp	Met	Pro	Arg	Ser	Pro	Gly	Asp	Val	Pro	
				195								200			205	
Gln	Ser	Pro	Ser	Asp	Val	Ser	Pro	Ser	Pro	Asp	Ala	Pro	Gln	Ser	Pro	
				210								215			220	
Gly	Gly	Met	Pro	His	Leu	Pro	Gly	Asp	Val	Leu	His	Ser	Pro	Gly	Asp	
				225								230			235	
Met	Pro	His	Ser	Ser	Gly	Gly	Val	Thr	His	Ser	Pro	Arg	Asp	Ile	Pro	
				245								250			255	
His	Leu	Pro	Gly	Asp	Arg	Pro	Asp	Phe	Thr	Gln	Asn	Asp	Val	Gln	Asn	
				260								265			270	
Arg	Asp	Met	Pro	Met	Asp	Ile	Ser	Ala	Leu	Ser	Ser	Pro	Ser	Cys	Thr	
				275								280			285	
Pro	Ala	Trp	Gly	Thr	Glu	Gln	Asp	Ser	Val	Ser	Lys	Lys	Lys	Lys	Lys	
				290								295			300	
Lys	Lys	Arg	Lys	Glu	Ile	Pro	Pro	Asn	Phe	Leu	Leu	Phe	Asn	Leu	Tyr	

305 310 315 320
 Arg Thr Arg Val Lys Asn
 325

<210> 4094

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4094

Met Gln His Gln Phe Ser Met Pro Thr Val Pro Pro Pro Glu Glu Leu
 1 5 10 15
 Leu Asp Cys Glu Thr Leu Ile Asp Gln Tyr Leu Arg Asp Pro Asn Leu
 20 25 30
 Gln Lys Arg Tyr Pro Leu Ala Leu Asn Arg Ile Ala Ala Gln Glu Val
 35 40 45
 Pro Ile Glu Ile Lys Pro Val Asn Pro Ser Pro Leu Ser Gln Leu Gln
 50 55 60
 Arg Met Glu Pro Lys Gln Met Phe Trp Val Arg Ala Arg Gly Tyr Ile
 65 70 75 80
 Gly Lys Ser Thr Pro Trp Met Gly Gly Asn His Ser Pro Arg Gly Leu
 85 90 95
 Pro Leu Ile Cys Cys Val Ala Leu Gly Thr
 100 105

<210> 4095

<211> 401

<212> PRT

<213> Homo sapiens

<400> 4095

Met Ser Leu Trp Lys Lys Thr Val Tyr Arg Ser Leu Cys Leu Ala Leu
 1 5 10 15
 Ala Leu Leu Val Ala Val Thr Val Phe Gln Arg Ser Leu Thr Pro Gly

	20		25		30	
Gln Phe Leu Gln Glu Pro Pro Pro Pro Thr Leu Glu Pro Gln Lys Ala						
	35		40		45	
Gln Lys Pro Asn Gly Gln Leu Val Asn Pro Asn Asn Phe Trp Lys Asn						
	50		55		60	
Pro Lys Asp Val Ala Ala Pro Thr Pro Met Ala Ser Gln Gly Pro Gln						
	65		70		75	80
Ala Trp Asp Val Thr Thr Thr Asn Cys Ser Ala Asn Ile Asn Leu Thr						
	85		90		95	
His Gln Pro Trp Phe Gln Val Leu Glu Pro Gln Phe Arg Gln Phe Leu						
	100		105		110	
Phe Tyr Arg His Cys Arg Tyr Phe Pro Met Leu Leu Asn His Pro Glu						
	115		120		125	
Lys Cys Arg Gly Asp Val Tyr Leu Leu Val Val Val Lys Ser Val Ile						
	130		135		140	
Thr Gln His Asp Arg Arg Glu Ala Ile Arg Gln Thr Trp Gly Arg Glu						
	145		150		155	160
Arg Gln Ser Ala Gly Gly Gly Arg Gly Ala Val Arg Thr Leu Phe Leu						
	165		170		175	
Leu Gly Thr Ala Ser Lys Gln Glu Glu Arg Thr His Tyr Gln Gln Leu						
	180		185		190	
Leu Ala Tyr Glu Asp Arg Leu Tyr Gly Asp Ile Leu Gln Trp Gly Phe						
	195		200		205	
Leu Asp Thr Phe Phe Asn Leu Thr Leu Lys Glu Ile His Phe Leu Lys						
	210		215		220	
Trp Leu Asp Ile Tyr Cys Pro His Val Pro Phe Ile Phe Lys Gly Asp						
	225		230		235	240
Asp Asp Val Phe Val Asn Pro Thr Asn Leu Leu Glu Phe Leu Ala Asp						
	245		250		255	
Arg Gln Pro Gln Glu Asn Leu Phe Val Gly Asp Val Leu Gln His Ala						
	260		265		270	
Arg Pro Ile Arg Arg Lys Asp Asn Lys Tyr Tyr Ile Pro Gly Ala Leu						
	275		280		285	
Tyr Gly Lys Ala Ser Tyr Pro Pro Tyr Ala Gly Gly Gly Gly Phe Leu						
	290		295		300	
Met Ala Gly Ser Leu Ala Arg Arg Leu His His Ala Cys Asp Thr Leu						

305 310 315 320
 Glu Leu Tyr Pro Ile Asp Asp Val Phe Leu Gly Met Cys Leu Glu Val
 325 330 335
 Leu Gly Val Gln Pro Thr Ala His Glu Gly Phe Lys Thr Phe Gly Ile
 340 345 350
 Ser Arg Asn Arg Asn Ser Arg Met Asn Lys Glu Pro Cys Phe Phe Arg
 355 360 365
 Ala Met Leu Val Val His Lys Leu Leu Pro Pro Glu Leu Leu Ala Met
 370 375 380
 Trp Gly Leu Val His Ser Asn Leu Thr Cys Ser Arg Lys Leu Gln Val
 385 390 395 400
 Leu

<210> 4096

<211> 668

<212> PRT

<213> Homo sapiens

<400> 4096

Met Asn Ala Leu Gln Ser Leu Thr Gly Gly Pro Ala Ala Gly Ala Ala
 1 5 10 15
 Gly Ile Gly Met Pro Pro Arg Gly Pro Gly Gln Ser Leu Gly Gly Met
 20 25 30
 Gly Ser Leu Gly Ala Met Gly Gln Pro Met Ser Leu Ser Gly Gln Pro
 35 40 45
 Pro Pro Gly Thr Ser Gly Met Ala Pro His Ser Met Ala Val Val Ser
 50 55 60
 Thr Ala Thr Pro Gln Thr Gln Leu Gln Leu Gln Gln Val Ala Leu Gln
 65 70 75 80
 Gln Gln Gln Gln Gln Gln Gln Phe Gln Gln Gln Gln Gln Ala Ala Leu
 85 90 95
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Phe Gln Ala Gln Gln
 100 105 110
 Ser Ala Met Gln Gln Gln Phe Gln Ala Val Val Gln Gln Gln Gln Gln

115	120	125
Leu Gln Gln Gln Gln Gln Gln Gln Gln His Leu Ile Lys Leu His His		
130	135	140
Gln Asn Gln Gln Gln Ile Gln Gln Gln Gln Gln Gln Leu Gln Arg Ile		
145	150	155
Ala Gln Leu Gln Leu Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln		
165	170	175
Gln Gln Gln Gln Gln Gln Ala Leu Gln Ala Gln Pro Pro Ile Gln Gln		
180	185	190
Pro Pro Met Gln Gln Pro Gln Pro Pro Pro Ser Gln Ala Leu Pro Gln		
195	200	205
Gln Leu Gln Gln Met His His Thr Gln His His Gln Pro Pro Pro Gln		
210	215	220
Pro Gln Gln Pro Pro Val Ala Gln Asn Gln Pro Ser Gln Leu Pro Pro		
225	230	235
Gln Ser Gln Thr Gln Pro Leu Val Ser Gln Ala Gln Ala Leu Pro Gly		
245	250	255
Gln Met Leu Tyr Thr Gln Pro Pro Leu Lys Phe Val Arg Ala Pro Met		
260	265	270
Val Val Gln Gln Pro Pro Val Gln Pro Gln Val Gln Gln Gln Gln Thr		
275	280	285
Ala Val Gln Thr Ala Gln Ala Ala Gln Met Val Ala Pro Gly Val Gln		
290	295	300
Val Ser Gln Ser Ser Leu Pro Met Leu Ser Ser Pro Ser Pro Gly Gln		
305	310	315
Gln Val Gln Thr Pro Gln Ser Met Pro Pro Pro Pro Gln Pro Ser Pro		
325	330	335
Gln Pro Gly Gln Pro Ser Ser Gln Pro Asn Ser Asn Val Ser Ser Gly		
340	345	350
Pro Ala Pro Ser Pro Ser Ser Phe Leu Pro Ser Pro Ser Pro Gln Pro		
355	360	365
Ser Gln Ser Pro Val Thr Ala Arg Thr Pro Gln Asn Phe Ser Val Pro		
370	375	380
Ser Pro Gly Pro Leu Asn Thr Pro Val Asn Pro Ser Ser Val Met Ser		
385	390	395
Pro Ala Gly Ser Ser Gln Ala Glu Glu Gln Gln Tyr Leu Asp Lys Leu		

	405	410	415
Lys Gln Leu Ser Lys Tyr Ile Glu Pro Leu Arg Arg Met Ile Asn Lys			
	420	425	430
Ile Asp Lys Asn Glu Asp Arg Lys Lys Asp Leu Ser Lys Met Lys Ser			
	435	440	445
Leu Leu Asp Ile Leu Thr Asp Pro Ser Lys Arg Cys Pro Leu Lys Thr			
	450	455	460
Leu Gln Lys Cys Glu Ile Ala Leu Glu Lys Leu Lys Asn Asp Met Ala			
465	470	475	480
Val Pro Thr Pro Pro Pro Pro Pro Val Pro Pro Thr Lys Gln Gln Tyr			
	485	490	495
Leu Cys Gln Pro Leu Leu Asp Ala Val Leu Ala Asn Ile Arg Ser Pro			
	500	505	510
Val Phe Asn His Ser Leu Tyr Arg Thr Phe Val Pro Ala Met Thr Ala			
	515	520	525
Ile His Gly Pro Pro Ile Thr Ala Pro Val Val Cys Thr Arg Lys Arg			
	530	535	540
Arg Leu Glu Asp Asp Glu Arg Gln Ser Ile Pro Ser Val Leu Gln Gly			
545	550	555	560
Glu Val Ala Arg Leu Asp Pro Lys Phe Leu Val Asn Leu Asp Pro Ser			
	565	570	575
His Cys Ser Asn Asn Gly Thr Val His Leu Ile Cys Lys Leu Asp Asp			
	580	585	590
Lys Asp Leu Pro Ser Val Pro Pro Leu Glu Leu Ser Val Pro Ala Asp			
	595	600	605
Tyr Pro Ala Gln Ser Pro Leu Trp Ile Asp Arg Gln Trp Gln Tyr Asp			
	610	615	620
Ala Asn Pro Phe Leu Gln Ser Val His Arg Cys Met Thr Ser Arg Leu			
625	630	635	640
Leu Gln Leu Pro Asp Lys His Ser Val Thr Ala Leu Leu Asn Thr Trp			
	645	650	655
Ala Gln Ser Val His Gln Ala Cys Leu Ser Ala Ala			
	660	665	

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4097

Met Gln His Asn Ala Trp Leu Ile Phe Val Phe Ser Val Asp Thr Gly
 1 5 10 15
 Phe Cys His Val Val Gln Ala Gly Leu Lys Leu Leu Ser Ser Ser Asp
 20 25 30
 Pro Pro Thr Leu Ala Ser Gln Ser Ala Arg Ile Thr Gly Met Ser His
 35 40 45
 Gly Ala Trp Pro Ser Leu Ala Val Phe Tyr Lys Ala Lys His Ala Thr
 50 55 60
 Thr Ile Gln Pro Thr Asn Tyr Thr Leu Gly His Leu Ser Gln Arg Asn
 65 70 75 80
 Glu Asn Ile Leu Thr Lys Asn Pro His Met Asn Ala His Ser Ile Leu
 85 90 95
 Gly His Asn Ser
 100

<210> 4098

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4098

Met Ser Ser Leu Glu Ile Ser Ser Ser Cys Phe Ser Leu Glu Thr Lys
 1 5 10 15
 Leu Pro Leu Ser Pro Pro Leu Val Glu Asp Ser Ala Phe Glu Pro Ser
 20 25 30
 Arg Lys Asp Met Asp Glu Val Glu Glu Lys Ser Lys Asp Val Ile Asn
 35 40 45
 Phe Thr Ala Glu Lys Leu Ser Val Asp Glu Val Ser Gln Leu Val Ile
 50 55 60
 Ser Pro Leu Cys Gly Ala Ile Ser Leu Phe Val Gly Thr Thr Arg Asn

65 70 75 80
 Asn Phe Glu Gly Lys Lys Val Ile Ser Leu Glu Tyr Glu Ala Tyr Leu
 85 90 95
 Pro Met Ala Glu Asn Glu Val Arg Lys Ile Cys Ser Asp Ile Arg Gln
 100 105 110
 Lys Trp Pro Val Lys His Ile Ala Val Phe His Arg Leu Gly Tyr Asp
 115 120 125
 Phe Leu Tyr His Ser Lys Ser
 130 135

<210> 4099

<211> 488

<212> PRT

<213> Homo sapiens

<400> 4099

Met Gln His Val Ser Ser Ser Gln Ser Ser Gln Arg His Val Gln Trp
 1 5 10 15
 Pro Gly Ala Cys Pro Gly Ala Gly Glu Glu Gln Pro Ala Cys Ser Gln
 20 25 30
 Pro Ser Leu Pro Leu Thr Leu Pro Ser Pro Ser His Gln Leu Gln Gln
 35 40 45
 Leu Met Val Arg Gly Gly Pro Ala Gly Gly Gln Asn Met Asn Val Asp
 50 55 60
 Leu Gln Gly Val Gly Pro Gly Leu Gln Gly Ser Pro Gln Val Thr Leu
 65 70 75 80
 Ala Pro Leu Pro Leu Pro Ser Pro Thr Ser Pro Gly Phe Gln Phe Ser
 85 90 95
 Ala Gln Pro Arg Arg Phe Glu His Gly Ser Pro Ser Tyr Ile Gln Val
 100 105 110
 Thr Ser Pro Leu Ser Gln Gln Val Gln Thr Gln Ser Pro Thr Gln Pro
 115 120 125
 Ser Pro Gly Pro Gly Gln Ala Leu Gln Asn Val Arg Ala Gly Ala Pro
 130 135 140

Gly Pro Gly Leu Gly Leu Cys Ser Ser Ser Pro Thr Gly Asp Phe Val
 145 150 155 160
 Asp Ala Ser Val Leu Val Arg Gln Ile Ser Leu Ser Pro Ser Ser Gly
 165 170 175
 Gly His Leu Val Phe Gln Asp Gly Ser Gly Leu Thr Gln Ile Ala Gln
 180 185 190
 Gly Ala Gln Val Gln Leu Gln His Pro Gly Thr Pro Ile Thr Val Arg
 195 200 205
 Glu Arg Arg Pro Ser Gln Pro His Thr Gln Ser Gly Gly Thr Ile His
 210 215 220
 His Leu Gly Pro Gln Ser Pro Ala Ala Ala Gly Gly Ala Gly Leu Gln
 225 230 235 240
 Pro Leu Ala Ser Pro Ser His Ile Thr Thr Ala Asn Leu Pro Pro Gln
 245 250 255
 Ile Ser Ser Ile Ile Gln Gly Gln Leu Val Gln Gln Gln Gln Val Leu
 260 265 270
 Gln Gly Pro Pro Leu Pro Arg Pro Leu Gly Phe Glu Arg Thr Pro Gly
 275 280 285
 Val Leu Leu Pro Gly Ala Gly Gly Ala Ala Gly Phe Gly Met Thr Ser
 290 295 300
 Pro Pro Pro Pro Thr Ser Pro Ser Arg Thr Ala Val Pro Pro Gly Leu
 305 310 315 320
 Ser Ser Leu Pro Leu Thr Ser Val Gly Asn Thr Gly Met Lys Lys Val
 325 330 335
 Pro Lys Lys Leu Glu Glu Ile Pro Pro Ala Ser Pro Glu Met Ala Gln
 340 345 350
 Met Arg Lys Gln Cys Leu Asp Tyr His His Gln Glu Met Gln Ala Leu
 355 360 365
 Lys Glu Val Phe Lys Glu Tyr Leu Ile Glu Leu Phe Phe Leu Gln His
 370 375 380
 Phe Gln Gly Asn Met Met Asp Phe Leu Ala Phe Lys Glu Arg Leu Tyr
 385 390 395 400
 Gly Pro Leu Gln Ala Tyr Leu Arg Gln Asn Asp Leu Asp Ile Glu Glu
 405 410 415
 Glu Glu Glu Glu His Phe Glu Val Ile Asn Asp Glu Val Lys Val Val
 420 425 430

Ala Arg Lys His Gly Gln Pro Gly Thr Ser Val Ala Ile Ala Thr Gln
 435 440 445
 Leu Pro Pro Arg Thr Ser Ala Ala Phe Pro Ala Gln Gln Gln Pro Leu
 450 455 460
 Gln Gln Ile His Met Gly Thr Pro Val Pro Gly Asp Val Asn Ser Ile
 465 470 475 480
 Lys Met Glu Ala Ser Lys Arg Gln
 485

<210> 4100

<211> 262

<212> PRT

<213> Homo sapiens

<400> 4100

Met Tyr Ile Leu Val Tyr Thr Tyr Val Tyr Thr Cys Ile Cys Ile Arg
 1 5 10 15
 Val Tyr Val His Val Tyr Gly Cys Thr Asp Val Tyr Ser Met Tyr Ile
 20 25 30
 Cys Met His Val Tyr Met Cys Thr Leu Tyr Thr Val Tyr Met Cys Val
 35 40 45
 Tyr Met Cys Thr Cys Ile Pro Val Arg Val Tyr Ile His Ile Ile Tyr
 50 55 60
 Thr Tyr Met Tyr Ile His Met His Ala Tyr Ala Tyr Met Cys Val Phe
 65 70 75 80
 Ile Cys Thr His Met His Thr Tyr Val Tyr Ser Tyr Ala Arg Val Cys
 85 90 95
 Ile His Met Tyr Ile His Ile His Ala Tyr Ala Tyr Ile Cys Ile Phe
 100 105 110
 Ile Tyr Thr His Met His Thr Tyr Val Tyr Ser Tyr Ala Arg Ile Cys
 115 120 125
 Ile His Met Tyr Ile His Ile His Ala Tyr Ala Cys Ile Cys Met Phe
 130 135 140
 Met Tyr Ala His Met Arg Ala Tyr Val Tyr Ser Tyr Thr Arg Ile Cys
 145 150 155 160

Ile His Ile Cys Ile Phe Ile Tyr Thr Tyr Val Cys Met Cys Val Cys
 165 170 175
 Ser Cys Ile His Val Tyr Thr Cys Val Tyr Ile His Ile Tyr Ile Gly
 180 185 190
 Met His Ile Cys Val Tyr Ser Tyr Met His Arg Tyr Thr Tyr Val Tyr
 195 200 205
 Ile His Ile Tyr Ile Cys Ile His Met Tyr Thr His Ile His Ile His
 210 215 220
 Thr His Asn Phe Ser Leu Thr Ile Cys Leu Leu Met Asn Thr Val Cys
 225 230 235 240
 Phe Ser Ile Leu Ala Thr Gly Asn Asn Ala Ser Met Asn Met Ala Val
 245 250 255
 Gln Ile Tyr Leu Arg Tyr
 260

<210> 4101

<211> 527

<212> PRT

<213> Homo sapiens

<400> 4101

Met Trp Pro Phe Ile Cys Gln Phe Ile Glu Lys Leu Phe Arg Glu Thr
 1 5 10 15
 Ile Glu Pro Ala Val Arg Gly Ala Asn Thr His Leu Ser Thr Phe Ser
 20 25 30
 Phe Thr Lys Val Asp Val Gly Gln Gln Pro Leu Arg Ile Asn Gly Val
 35 40 45
 Lys Val Tyr Thr Glu Asn Val Asp Lys Arg Gln Ile Ile Leu Asp Leu
 50 55 60
 Gln Ile Ser Phe Val Gly Asn Cys Glu Ile Asp Leu Glu Ile Lys Arg
 65 70 75 80
 Tyr Phe Cys Arg Ala Gly Val Lys Ser Ile Gln Ile His Gly Thr Met
 85 90 95
 Arg Val Ile Leu Glu Pro Leu Ile Gly Asp Met Pro Leu Val Gly Ala
 100 105 110

Leu Ser Ile Phe Phe Leu Arg Lys Pro Leu Leu Glu Ile Asn Trp Thr
 115 120 125
 Gly Leu Thr Asn Leu Leu Asp Val Pro Gly Leu Asn Gly Leu Ser Asp
 130 135 140
 Thr Ile Ile Leu Asp Ile Ile Ser Asn Tyr Leu Val Leu Pro Asn Arg
 145 150 155 160
 Ile Thr Val Pro Leu Val Ser Glu Val Gln Ile Ala Gln Leu Arg Phe
 165 170 175
 Pro Val Pro Lys Gly Val Leu Arg Ile His Phe Ile Glu Ala Gln Asp
 180 185 190
 Leu Gln Gly Lys Asp Thr Tyr Leu Lys Gly Leu Val Lys Gly Lys Ser
 195 200 205
 Asp Pro Tyr Gly Ile Ile Arg Val Gly Asn Gln Ile Phe Gln Ser Arg
 210 215 220
 Val Ile Lys Glu Asn Leu Ser Pro Lys Trp Asn Glu Val Tyr Glu Ala
 225 230 235 240
 Leu Val Tyr Glu His Pro Gly Gln Glu Leu Glu Ile Glu Leu Phe Asp
 245 250 255
 Glu Asp Pro Asp Lys Asp Asp Phe Leu Gly Ser Leu Met Ile Asp Leu
 260 265 270
 Ile Glu Val Glu Lys Glu Arg Leu Leu Asp Glu Trp Phe Thr Leu Asp
 275 280 285
 Glu Val Pro Lys Gly Lys Leu His Leu Arg Leu Glu Trp Leu Thr Leu
 290 295 300
 Met Pro Asn Ala Ser Asn Leu Asp Lys Val Leu Thr Asp Ile Lys Ala
 305 310 315 320
 Asp Lys Asp Gln Ala Asn Asp Gly Leu Ser Ser Ala Leu Leu Ile Leu
 325 330 335
 Tyr Leu Asp Ser Ala Arg Asn Leu Pro Ser Gly Lys Lys Ile Ser Ser
 340 345 350
 Asn Pro Asn Pro Val Val Gln Met Ser Val Gly His Lys Ala Gln Glu
 355 360 365
 Ser Lys Ile Arg Tyr Lys Thr Asn Glu Pro Val Trp Glu Glu Asn Phe
 370 375 380
 Thr Phe Phe Ile His Asn Pro Lys Arg Gln Asp Leu Glu Val Glu Val
 385 390 395 400

Arg Asp Glu Gln His Gln Cys Ser Leu Gly Ser Leu Lys Val Pro Leu
 405 410 415
 Ser Gln Leu Leu Thr Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln
 420 425 430
 Leu Ser Asn Ser Gly Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu
 435 440 445
 Arg Val Leu His Leu Glu Lys Arg Glu Arg Pro Pro Asp His Gln His
 450 455 460
 Ser Ala Gln Val Lys Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr
 465 470 475 480
 Ser Ile Lys Ser His Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn
 485 490 495
 Thr Ala Pro Ser Thr Ser Gln Ser Arg Ser Arg Pro Pro Ala Ser Pro
 500 505 510
 Arg Thr Ser Arg Cys Pro Ser Pro Pro Arg Ser Cys Gly Lys Gly
 515 520 525

<210> 4102

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4102 .

Met Gly Pro Cys Asn Gln Ala Gln Leu Cys Leu Val Phe Val Gln Thr
 1 5 10 15
 Ser Asn Gly Pro Gly Arg Gly Trp His Phe Gly Tyr Phe Cys Leu Arg
 20 25 30
 Gly Phe Leu Tyr Pro Asp Gln Ser Gln Pro His Ser Gln Trp Val Met
 35 40 45
 Arg Val Glu Ile Ala Ser Ser Tyr Pro Cys Phe Leu Gln Cys Leu Phe
 50 55 60
 Pro His Pro Asn Arg His Thr His Ala His Thr His Thr His Thr His
 65 70 75 80
 Thr His Thr His Thr Pro Ser Phe Pro Leu Leu Leu Ser Leu Gly Thr
 85 90 95

Gly Ala Pro Pro Cys Ser Pro Cys Ser Thr Gln Pro Pro Gly Arg Ser
 100 105 110
 Pro Pro Thr Phe Asp Glu Ser Pro Pro Arg Lys Lys Tyr Asn Asn Leu
 115 120 125
 Glu Phe Gln Leu Asn Leu Gln
 130 135

<210> 4103

<211> 136

<212> PRT

<213> Homo sapiens

<400> 4103

Met Arg Val Arg Met Cys Thr Tyr Cys Ser Leu Asp Phe Pro Ile Thr
 1 5 10 15
 Lys Cys Leu Ser Gln Val Thr Leu Ser Ser Ser Ser Gln Phe Leu Arg
 20 25 30
 Gln Ala Met Glu Thr Gly Ala Asp Ala Lys Trp Ser Arg Gly Arg Arg
 35 40 45
 Ala Ala Cys Phe Ala Gly Pro Ala Pro Arg Leu Pro Ser Arg Ala Ala
 50 55 60
 Leu Ser Leu Gly Thr Val Asn Ser His Arg Ser Cys Gln Pro Pro Val
 65 70 75 80
 Leu Gly His Ala Pro His Met Asp Leu Glu Ser Val Ser Leu Leu Leu
 85 90 95
 Met Ser Thr Ser Arg Ser Leu Ser Phe Ala Phe Met Cys Leu Tyr Ser
 100 105 110
 Leu Tyr Ser Ser Ala Ile Gly Val Arg Ser Ser Phe Trp Thr Phe Leu
 115 120 125
 Met Gln Ile Lys Glu Lys Gly Val
 130 135

<210> 4104

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4104

Met Gly His Ala Gly Cys Gln Phe Lys Ala Leu Leu Trp Lys Asn Trp

1	5	10	15
Leu Cys Arg	Leu Arg Asn Pro Val	Leu Phe Leu Ala Glu Phe	Phe Trp
20	25	30	
Pro Cys Ile	Leu Phe Val Ile Leu Thr Val	Leu Arg Phe Gln Glu	Pro
35	40	45	
Pro Arg Tyr Arg Asp Ile Cys Tyr	Leu Gln Pro Arg Asp	Leu Pro Ser	
50	55	60	
Cys Gly Val Ile Pro Phe Val Gln Ser	Leu Leu Cys Asn Thr Gly	Ser	
65	70	75	80
Arg Cys Arg Asn Phe Ser Tyr Glu Gly Ser Met Glu His His Phe Arg			
85	90	95	
Leu Ser Arg Phe Gln Thr Ala Ala Asp Pro Lys Lys Val Asn Asn Leu			
100	105	110	
Ala Phe Leu Lys Glu Ile Gln Asp Leu Ala			
115	120		

<210> 4105

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4105

1	5	10	15
Met Ser Ser Ile Val Cys Pro Met Glu Glu Val Leu Arg Ala Ser Ala			
20	25	30	
Gln Asn Lys Asp Asn Thr Lys Gly Ile Gly Arg Phe Tyr Lys Ala Gln			
35	40	45	
Phe Leu Ser Leu Met Ser Phe Ile Lys Tyr Phe Pro Tyr Tyr Leu Lys			
Ala Thr Ile Gln Ser Ser Phe Ser Ala Ser Thr Val His Leu Val Cys			

50 55 60
 Gly Thr His Ser Val Gln Cys Phe Ile Phe Pro Val Ser Ile Ala Cys
 65 70 75 80
 His Leu Gly Arg Ile Leu Ile Ser Pro Val Thr Thr Thr Pro Asn Arg
 85 90 95
 Ala Leu His Gly Ser Glu Cys Ser Lys Tyr His Leu Leu Thr Asn Ala
 100 105 110
 Ser Lys Ser Thr Thr Asn Gln Asn Ile Val Pro Lys Glu Lys Ser Thr
 115 120 125
 Lys Tyr His Asn
 130

<210> 4106

<211> 824

<212> PRT

<213> Homo sapiens

<400> 4106

Met Ile Arg Ser Ser Ser Asp Ser Ser Tyr Met Ser Gly Ser Pro Gly
 1 5 10 15
 Gly Ser Pro Gly Ser Gly Ser Ala Glu Lys Pro Ser Ser Asp Val Asp
 20 25 30
 Ile Ser Thr His Ser Pro Ser Leu Pro Leu Ala Arg Glu Pro Val Val
 35 40 45
 Leu Ser Ile Ala Ser Ser Arg Leu Pro Gln Glu Ser Pro Pro Leu Pro
 50 55 60
 Glu Ser Arg Asp Ser His Pro Pro Leu Arg Leu Lys Lys Ser Phe Glu
 65 70 75 80
 Ile Leu Val Arg Lys Pro Met Ser Ser Lys Pro Lys Pro Pro Pro Arg
 85 90 95
 Lys Tyr Phe Lys Ser Asp Ser Asp Pro Gln Lys Ser Leu Glu Glu Arg
 100 105 110
 Glu Asn Ser Ser Cys Ser Ser Gly His Thr Pro Pro Thr Cys Gly Gln
 115 120 125
 Glu Ala Arg Glu Leu Leu Pro Leu Leu Leu Pro Gln Glu Asp Thr Ala

130	135	140	
Gly Arg Ser Pro Ser Ala Ser Ala Gly Cys Pro Gly Pro Gly Ile Gly			
145	150	155	160
Pro Gln Thr Lys Ser Ser Thr Glu Gly Glu Pro Gly Trp Arg Arg Ala			
	165	170	175
Ser Pro Val Thr Gln Thr Ser Pro Ile Lys His Pro Leu Leu Lys Arg			
	180	185	190
Gln Ala Arg Met Asp Tyr Ser Phe Asp Thr Thr Ala Glu Asp Pro Trp			
	195	200	205
Val Arg Ile Ser Asp Cys Ile Lys Asn Leu Phe Ser Pro Ile Met Ser			
210	215	220	
Glu Asn His Gly His Met Pro Leu Gln Pro Asn Ala Ser Leu Asn Glu			
225	230	235	240
Glu Glu Gly Thr Gln Gly His Pro Asp Gly Thr Pro Pro Lys Leu Asp			
	245	250	255
Thr Ala Asn Gly Thr Pro Lys Val Tyr Lys Ser Ala Asp Ser Ser Thr			
	260	265	270
Val Lys Lys Gly Pro Pro Val Ala Pro Lys Pro Ala Trp Phe Arg Gln			
	275	280	285
Ser Leu Lys Gly Leu Arg Asn Arg Ala Ser Asp Pro Arg Gly Leu Pro			
290	295	300	
Asp Pro Ala Leu Ser Thr Gln Pro Ala Pro Ala Ser Arg Glu His Leu			
305	310	315	320
Gly Ser His Ile Arg Ala Ser Ser Ser Ser Ser Ile Arg Gln Arg Ile			
	325	330	335
Ser Ser Phe Glu Thr Phe Gly Ser Pro Gln Leu Pro Asp Lys Gly Ala			
	340	345	350
Gln Arg Leu Ser Leu Gln Pro Ser Ser Gly Glu Ala Ala Lys Pro Leu			
	355	360	365
Gly Lys His Glu Glu Gly Arg Phe Ser Gly Leu Leu Gly Arg Gly Ala			
370	375	380	
Ala Pro Thr Leu Val Pro Gln Gln Pro Glu Gln Val Leu Ser Ser Gly			
385	390	395	400
Ser Pro Ala Ala Ser Glu Ala Arg Asp Pro Gly Val Ser Glu Ser Pro			
	405	410	415
Pro Pro Gly Arg Gln Pro Asn Gln Lys Thr Leu Pro Pro Gly Pro Asp			

420	425	430
Pro Leu Leu Arg Leu Leu Ser Thr Gln Ala Glu Glu Ser Gln Gly Pro		
435	440	445
Val Leu Lys Met Pro Ser Gln Arg Ala Arg Ser Phe Pro Leu Thr Arg		
450	455	460
Ser Gln Ser Cys Glu Thr Lys Leu Leu Asp Glu Lys Thr Ser Lys Leu		
465	470	475
Tyr Ser Ile Ser Ser Gln Val Ser Ser Ala Val Met Lys Ser Leu Leu		
485	490	495
Cys Leu Pro Ser Ser Ile Ser Cys Ala Gln Thr Pro Cys Ile Pro Lys		
500	505	510
Glu Gly Ala Ser Pro Thr Ser Ser Ser Asn Glu Asp Ser Ala Ala Asn		
515	520	525
Gly Ser Ala Glu Thr Ser Ala Leu Asp Thr Gly Phe Ser Leu Asn Leu		
530	535	540
Ser Glu Leu Arg Glu Tyr Thr Glu Gly Leu Thr Glu Ala Lys Glu Asp		
545	550	555
Asp Asp Gly Asp His Ser Ser Leu Gln Ser Gly Gln Ser Val Ile Ser		
565	570	575
Leu Leu Ser Ser Glu Glu Leu Lys Lys Leu Ile Glu Glu Val Lys Val		
580	585	590
Leu Asp Glu Ala Thr Leu Lys Gln Leu Asp Gly Ile His Val Thr Ile		
595	600	605
Leu His Lys Glu Glu Gly Ala Gly Leu Gly Phe Ser Leu Ala Gly Gly		
610	615	620
Ala Asp Leu Glu Asn Lys Val Ile Thr Val His Arg Val Phe Pro Asn		
625	630	635
Gly Leu Ala Ser Gln Glu Gly Ala Ile Gln Lys Gly Asn Glu Val Leu		
645	650	655
Ser Ile Asn Gly Lys Ser Leu Lys Gly Thr Thr His His Asp Ala Leu		
660	665	670
Ala Ile Leu Arg Gln Ala Arg Glu Pro Arg Gln Ala Val Ile Val Thr		
675	680	685
Arg Lys Leu Thr Pro Glu Ala Met Pro Asp Leu Asn Ser Ser Thr Asp		
690	695	700
Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr		

705 710 715 720
 Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly Leu
 725 730 735
 Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys Pro
 740 745 750
 Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser Glu
 755 760 765
 Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala Met
 770 775 780
 Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu Pro
 785 790 795 800
 Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser Lys
 805 810 815
 Glu Thr Thr Ala Ala Gly Asp Ser
 820

<210> 4107

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4107

Met Glu Gln Glu Ser Glu Cys Thr Arg Glu Thr Val Arg Pro Thr Ala
 1 5 10 15
 Gln Ala Ser Trp Pro Ser Ala Trp Leu Leu Gly Cys Ala Asp Gly
 20 25 30
 Cys Val Leu Arg Gly Tyr Ile Ser Cys Leu Arg Cys Leu Pro Leu Pro
 35 40 45
 Arg Thr Phe Ile Gly Leu Glu Val Thr Ser Gly His Ala Gln Phe Leu
 50 55 60
 Asp Leu Val Ser Glu Val Asp Arg Val Met Glu Glu Phe Asn Leu Thr
 65 70 75 80
 Thr Phe Tyr Gln Asp Pro Ser Phe His Leu Ser Leu Ala Trp Cys Val
 85 90 95
 Gly Asp Ala Arg Leu Gln Leu Glu Gly Gln Cys Leu Gln Glu Leu Gln

100 105 110
 Ala Ile Val Asp Gly Phe Glu Asp Ala Glu Val Leu Leu Arg Val His
 115 120 125
 Thr Glu Gln Val Arg Cys Lys Ser Gly Asn Lys Phe Phe Ser Met Pro
 130 135 140
 Leu Lys
 145

<210> 4108

<211> 139

<212> PRT

<213> Homo sapiens

<400> 4108

Met Val Leu Pro Gly Leu Thr Leu Cys Ser Gly Ala Val Gly Thr Ser
 1 5 10 15
 Thr Gln Trp Leu Met Ala Ala Leu Ala Gln Leu Ser Arg Pro Gly Arg
 20 25 30
 Arg Leu Pro Pro Pro Pro Pro Cys Cys Cys Leu Val Gln Pro Leu His
 35 40 45
 Gly Ser Ser Ser Leu Cys Gln Arg Glu Gly Leu Phe His His Lys Gln
 50 55 60
 His Ser His Ser His Gly Ala Trp Phe Leu Ser Pro Val His His Ser
 65 70 75 80
 Gln Ile Pro Gln Leu Ala Ala Cys Pro Leu Gln Ser Leu Arg Leu Ser
 85 90 95
 Lys Pro Arg Ser Pro Gly Arg Cys Cys Ala Trp Cys Gly Cys Leu Asn
 100 105 110
 Cys Glu Pro Phe Lys Trp Leu Pro Ser Pro Arg Arg Trp Pro Gly Ala
 115 120 125
 Cys Leu Lys Leu Cys Cys Thr Gln Ala Leu Cys
 130 135

<210> 4109

<211> 189

<212> PRT

<213> Homo sapiens

<400> 4109

```

Met Gln Asn Gly Ala Asp Trp Leu Phe Pro Pro Gln Leu Tyr Ser Leu
  1              5              10              15
Leu Glu Arg Ile Asn Pro Asp His Ser Phe Pro Val Ser Ser His Cys
      20              25              30
Leu Arg Ala Ala Ala Phe Tyr Val Arg Gly Leu Phe Ser Phe Phe Gln
      35              40              45
Gly Arg Tyr Asn Glu Ala Lys Arg Phe Leu Arg Glu Thr Leu Lys Met
      50              55              60
Ser Asn Ala Glu Asp Leu Asn Arg Leu Thr Ala Cys Ser Leu Val Leu
      65              70              75              80
Leu Gly His Ile Phe Tyr Val Leu Gly Asn His Arg Glu Ser Asn Asn
      85              90              95
Met Val Val Pro Ala Met Gln Leu Ala Ser Lys Ile Pro Asp Met Ser
      100             105             110
Val Gln Leu Trp Ser Ser Ala Leu Leu Arg Asp Leu Asn Lys Ala Cys
      115             120             125
Gly Asn Ala Met Asp Ala His Glu Ala Ala Gln Met His Gln Asn Phe
      130             135             140
Ser Gln Gln Leu Leu Gln Asp His Ile Glu Ala Cys Ser Leu Pro Glu
      145             150             155             160
His Asn Leu Ile Thr Trp Thr Asp Gly Pro Pro Pro Val Gln Phe Gln
      165             170             175
Ala Gln Asn Gly Pro Asn Thr Ser Leu Ala Ser Leu Leu
      180             185

```

<210> 4110

<211> 851

<212> PRT

<213> Homo sapiens

<400> 4110

Met Leu Lys Asp Glu Phe His Leu Lys Phe Phe Met Cys Val Ile Gln
 1 5 10 15
 Ser Arg Gln Leu Val Arg Thr Pro Gln Arg Thr Ala Gly Glu Ala Ser
 20 25 30
 Thr Ser Ser Met Leu Ile Pro Lys Pro Pro Pro Lys Thr Asp Ile Leu
 35 40 45
 Lys Ser Leu Asp Thr Met Asp Asp Pro Asp Thr Val Gly Ser Ile Pro
 50 55 60
 Val Phe Lys Thr Glu Trp Ile Met Thr His Glu Glu His His Ala Ala
 65 70 75 80
 Lys Thr Leu Gly Ile Gly Lys Ala Ile Ala Val Leu Thr Ser Gly Gly
 85 90 95
 Asp Ala Gln Gly Met Asn Ala Ala Val Arg Ala Val Val Arg Val Gly
 100 105 110
 Ile Phe Thr Gly Ala Arg Val Phe Phe Val His Glu Gly Tyr Gln Gly
 115 120 125
 Leu Val Asp Gly Gly Asp His Ile Lys Glu Ala Thr Trp Glu Ser Val
 130 135 140
 Ser Met Met Leu Gln Leu Gly Gly Thr Val Ile Gly Ser Ala Arg Cys
 145 150 155 160
 Lys Asp Phe Arg Glu Arg Glu Gly Arg Leu Arg Ala Ala Tyr Asn Leu
 165 170 175
 Val Lys Arg Gly Ile Thr Asn Leu Cys Val Ile Gly Gly Asp Gly Ser
 180 185 190
 Leu Thr Gly Ala Asp Thr Phe Arg Ser Glu Trp Ser Asp Leu Leu Ser
 195 200 205
 Asp Leu Gln Lys Ala Gly Lys Ile Thr Asp Glu Glu Ala Thr Lys Ser
 210 215 220
 Ser Tyr Leu Asn Ile Val Gly Leu Val Gly Ser Ile Asp Asn Asp Phe
 225 230 235 240
 Cys Gly Thr Asp Met Thr Ile Gly Thr Asp Ser Ala Leu His Arg Ile
 245 250 255
 Met Glu Ile Val Asp Ala Ile Thr Thr Thr Ala Gln Ser His Gln Arg
 260 265 270

Thr Phe Val Leu Glu Val Met Gly Arg His Cys Gly Tyr Leu Ala Leu
 275 280 285
 Val Thr Ser Leu Ser Cys Gly Ala Asp Trp Val Phe Ile Pro Glu Cys
 290 295 300
 Pro Pro Asp Asp Asp Trp Glu Glu His Leu Cys Arg Arg Leu Ser Glu
 305 310 315 320
 Thr Arg Thr Arg Gly Ser Arg Leu Asn Ile Ile Ile Val Ala Glu Gly
 325 330 335
 Ala Ile Asp Lys Asn Gly Lys Pro Ile Thr Ser Glu Asp Ile Lys Asn
 340 345 350
 Leu Val Val Lys Arg Leu Gly Tyr Asp Thr Arg Val Thr Val Leu Gly
 355 360 365
 His Val Gln Arg Gly Gly Thr Pro Ser Ala Phe Asp Arg Ile Leu Gly
 370 375 380
 Ser Arg Met Gly Val Glu Ala Val Met Ala Leu Leu Glu Gly Thr Pro
 385 390 395 400
 Asp Thr Pro Ala Cys Val Val Ser Leu Ser Gly Asn Gln Ala Val Arg
 405 410 415
 Leu Pro Leu Met Glu Cys Val Gln Val Thr Lys Asp Val Thr Lys Ala
 420 425 430
 Met Asp Glu Lys Lys Phe Asp Glu Ala Leu Lys Leu Arg Gly Arg Ser
 435 440 445
 Phe Met Asn Asn Trp Glu Val Tyr Lys Leu Leu Ala His Val Arg Pro
 450 455 460
 Pro Val Ser Lys Ser Gly Ser His Thr Val Ala Val Met Asn Val Gly
 465 470 475 480
 Ala Pro Ala Ala Gly Met Asn Ala Ala Val Arg Ser Thr Val Arg Ile
 485 490 495
 Gly Leu Ile Gln Gly Asn Arg Val Leu Val Val His Asp Gly Phe Glu
 500 505 510
 Gly Leu Ala Lys Gly Gln Ile Glu Glu Ala Gly Trp Ser Tyr Val Gly
 515 520 525
 Gly Trp Thr Gly Gln Gly Gly Ser Lys Leu Gly Thr Lys Arg Thr Leu
 530 535 540
 Pro Lys Lys Ser Phe Glu Gln Ile Ser Ala Asn Ile Thr Lys Phe Asn
 545 550 555 560

Ile Gln Gly Leu Val Ile Ile Gly Gly Phe Glu Ala Tyr Thr Gly Gly
 565 570 575
 Leu Glu Leu Met Glu Gly Arg Lys Gln Phe Asp Glu Leu Cys Ile Pro
 580 585 590
 Phe Val Val Ile Pro Ala Thr Val Ser Asn Asn Val Pro Gly Ser Asp
 595 600 605
 Phe Ser Val Gly Ala Asp Thr Ala Leu Asn Thr Ile Cys Thr Thr Cys
 610 615 620
 Asp Arg Ile Lys Gln Ser Ala Ala Gly Thr Lys Arg Arg Val Phe Ile
 625 630 635 640
 Ile Glu Thr Met Gly Gly Tyr Cys Gly Tyr Leu Ala Thr Met Ala Gly
 645 650 655
 Leu Ala Ala Gly Ala Asp Ala Ala Tyr Ile Phe Glu Glu Pro Phe Thr
 660 665 670
 Ile Arg Asp Leu Gln Ala Asn Val Glu His Leu Val Gln Lys Met Lys
 675 680 685
 Thr Thr Val Lys Arg Gly Leu Val Leu Arg Asn Glu Lys Cys Asn Glu
 690 695 700
 Asn Tyr Thr Thr Asp Phe Ile Phe Asn Leu Tyr Ser Glu Glu Gly Lys
 705 710 715 720
 Gly Ile Phe Asp Ser Arg Lys Asn Val Leu Gly His Met Gln Gln Gly
 725 730 735
 Gly Ser Pro Thr Ser Phe Asp Arg Asn Phe Ala Thr Lys Met Gly Ala
 740 745 750
 Lys Ala Met Asn Trp Met Ser Gly Lys Ile Lys Glu Ser Tyr Arg Asn
 755 760 765
 Gly Arg Ile Phe Ala Asn Thr Pro Asp Ser Gly Cys Val Leu Gly Met
 770 775 780
 Arg Lys Arg Ala Leu Val Phe Gln Pro Val Ala Glu Leu Lys Asp Gln
 785 790 795 800
 Thr Asp Phe Glu His Arg Ile Pro Lys Glu Gln Trp Trp Leu Lys Leu
 805 810 815
 Arg Pro Ile Leu Lys Ile Leu Ala Lys Tyr Glu Ile Asp Leu Asp Thr
 820 825 830
 Ser Asp His Ala His Leu Glu His Ile Thr Arg Lys Arg Ser Gly Glu
 835 840 845

Ala Ala Val

850

<210> 4111

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4111

```

Met Asp Asn Ser Val Arg Val Tyr Pro Glu Thr Leu Gln Glu Thr Phe
  1              5              10              15
Thr Glu Ala Pro Gly Phe Phe Thr Ser Ala Pro Asp Cys Thr Ser Trp
              20              25              30
Thr Trp Ala Trp Val Pro Val Glu Arg Thr Glu Glu Trp Met Arg His
              35              40              45
His Leu Thr Gly Pro Ser Pro Leu Ile Ser Pro Gly Thr Gln Asp Ser
              50              55              60
Leu Ala Cys Ser Cys Cys His Gln Glu Glu Asp Pro Pro Gly Ala Val
              65              70              75              80
His Gly Glu Val Leu Arg Ser Gly Gly Phe Cys Arg Gly Gly Met Trp
              85              90              95
Leu Leu Cys Asp Gly Leu Trp Ala Arg Lys Asp Leu Tyr Leu Pro Arg
              100              105              110

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<210> 4112

<211> 196

<212> PRT

<213> Homo sapiens

<400> 4112

```

Met Pro Glu Ala Val Asp Val Asp Glu Ser Gln Leu Glu Asn Val Cys
  1              5              10              15
Leu Ser Trp Gln Asn Glu Thr Ser Ser Gly Asn Leu Glu Ser Cys Ala
              20              25              30

```


Val Gly Pro Asp Asn Gly Thr Gly Ala Ala Pro Met His Cys Leu Leu
50 55 60
Phe Phe Leu Phe Phe Ser Asn Phe Phe Phe Leu Phe Pro Phe Leu Phe
65 70 75 80
Tyr Thr Phe Ile Phe Phe Phe Ser Leu Leu Phe Ser Trp Arg Trp Phe
85 90 95
Pro Pro Pro Leu Phe Leu Asp Arg Ala Gly Leu Gly Arg Gly Thr
100 105 110

<210> 4114

<211> 126

<212> PRT

<213> Homo sapiens

<400> 4114

Met Asn Ile Ser Val Lys Ala Val Pro Leu Gly Leu Thr Arg Asp Leu
1 5 10 15
Ile Ser Val Leu Cys Val Leu Ala Thr Ser Arg Val Arg Ile Ser Ala
20 25 30
Cys Pro Thr Ala Met Arg Asp Thr Thr Ala Thr Leu Gly Leu Ser Gly
35 40 45
Glu Ser Val Thr Glu Leu His Gln Asp Gly Ala Leu Pro His Pro Ser
50 55 60
Ala Cys Gln His Cys Ser Ser Lys Glu Pro Asp Val Thr Cys His Ser
65 70 75 80
Arg Val Gly Val Ile Leu Trp Val Ser Ser Trp Val Ala Pro Val Arg
85 90 95
Ala Val Pro Thr Thr Pro Thr Ala Pro Glu Ser Gly Gly Trp His Gln
100 105 110
Gly Cys Leu Thr Ser Ala Pro Gln Cys Phe Ser Leu Trp Leu
115 120 125

<210> 4115

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4115

```

Met Lys Thr Glu Leu Pro Val Gln Lys Gly Ser Arg Leu Pro Pro Pro
  1              5              10              15
Pro Pro Pro Cys Thr Ser Cys Pro Leu Pro Val His Ser Trp Asn Gln
      20              25              30
Pro Gly Gln Ala Thr Ser Gly Pro Gln Arg Gln Ala Gly Ser Ser Gly
      35              40              45
Pro Ser Arg Gly Arg Leu Glu Gly Leu Ala Asp Arg Phe Pro His Pro
      50              55              60
Pro Pro Pro Val Gln Val Phe Ala Ala Val Pro Arg Pro Pro Val Thr
      65              70              75              80
Pro Arg Gln Ile Thr Gly His Gln Ala Arg Asp Ser Leu Leu Phe Val
      85              90              95
Leu Ser Gly Leu Trp Leu Val Ser Phe Ser
      100              105

```

<210> 4116

<211> 213

<212> PRT

<213> Homo sapiens

<400> 4116

```

Met Leu Val Gly Cys Met Tyr Val Phe Phe Arg Lys Val Ser Val Arg
  1              5              10              15
His Leu Ser Lys Glu Asp Ile Tyr Ala Ala Lys Lys His Met Lys Lys
      20              25              30
Cys Ser Ala Ser Leu Ala Ile Arg Glu Met Gln Ile Lys Thr Thr Met
      35              40              45
Arg Cys His Leu Thr Pro Val Arg Met Ala Ile Ile Arg Lys Ser Gly
      50              55              60
Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu Leu His
      65              70              75              80

```

Cys Cys Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser Val Trp
 85 90 95
 Gln Phe Leu Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp Pro Ala Ile
 100 105 110
 Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys Cys Tyr Lys
 115 120 125
 Asp Thr Cys Thr Cys Met Phe Ile Ala Ala Leu Phe Thr Ile Ala Lys
 130 135 140
 Thr Trp Asn Pro Pro Lys Arg Pro Thr Met Ile Asp Trp Ile Lys Lys
 145 150 155 160
 Met Cys His Ile Tyr Thr Met Glu Tyr Tyr Ala Ala Ile Lys Asn Asp
 165 170 175
 Glu Phe Thr Ser Phe Val Gly Thr Trp Met Lys Leu Glu Ile Ile Ile
 180 185 190
 Leu Ser Lys Leu Ser Gln Glu Gln Lys Thr Lys His His Ile Phe Ser
 195 200 205
 Leu Ile Gly Gly Asn
 210

<210> 4117

<211> 137

<212> PRT

<213> Homo sapiens

<400> 4117

Met Leu His Lys Asp Ala Leu Cys Ala Arg Arg Arg His Cys Gln Leu
 1 5 10 15
 Cys Gly Gly Asp Arg Ser Glu Thr Val Ser Leu Glu Asp Leu Leu Gly
 20 25 30
 Gln Glu Gly Val Ser Asp Glu Ala Gln Gly Arg Leu Gly Arg Ser Val
 35 40 45
 Gly Phe Gly Ala Gly Ile Ser Glu Phe Trp Pro Val Pro Leu Pro Pro
 50 55 60
 Pro Val Gln Val Ala Gln Ala Gln Ser Pro Thr Ser Ala Arg Ala Pro
 65 70 75 80

Gln Gly Ser Trp Ala His Pro Asn Ser Ser Val Cys Pro Leu Trp Pro
 85 90 95
 Pro Pro Pro Pro Ala Gly Ser Pro Gly Pro Leu Pro Leu Pro Ala Arg
 100 105 110
 Leu Pro Cys Ala Ala Trp Asp His Phe Thr Lys Ser Phe Val Phe Gly
 115 120 125
 Pro Tyr Gly Asn Leu Leu Arg Gln Glu
 130 135

<210> 4118

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4118

Met Ile Trp Arg Lys Leu Lys Cys Leu Leu Trp Leu Gln Arg Ser Glu
 1 5 10 15
 Gly Thr Leu His Ser Trp Leu Asp Arg Leu Asn Ser Gly Ile Gly Glu
 20 25 30
 Val Val Gly Glu Trp Arg Gly Ala Glu Gly Thr Asp Thr Gly Arg Asp
 35 40 45
 Ile Ser Lys Asp Cys Gln Gln Gly Met Met Ile Thr Gln Gly Glu Gln
 50 55 60
 Val Gln Pro Val Ser Trp Cys Cys Pro Glu Leu Met Thr Ala Ile Lys
 65 70 75 80
 Leu Pro Asp Phe Thr Ala Cys Ser Ala Leu Cys Pro Pro Gly Ile Leu
 85 90 95
 Gly Thr Phe Ser Arg Leu Gly Pro Gln Gly Arg Leu Glu Ala Ala His
 100 105 110
 Ser Leu His Cys Gln Ala Leu Ala Gly Gln Trp Ser Trp Gly Glu Gly
 115 120 125
 Gly

<210> 4119

<211> 325

<212> PRT

<213> Homo sapiens

<400> 4119

```

Met Leu Leu Phe Ser Leu Trp Tyr Pro Leu Leu Leu Cys Lys Leu Leu
  1             5             10             15
Leu Thr Lys Ile Asn Trp Arg Lys Lys Arg Lys Lys Lys Lys Glu Glu
      20             25             30
Lys Lys Arg Glu Lys Glu Pro Glu Lys Pro Ala Lys Pro Leu Thr Ala
      35             40             45
Glu Lys Leu Gln Lys Lys Asp Gln Gln Leu Glu Pro Lys Lys Ser Thr
      50             55             60
Ser Pro Lys Lys Ala Ala Glu Pro Thr Val Asp Leu Leu Gly Leu Asp
      65             70             75             80
Gly Pro Ala Val Ala Pro Val Thr Asn Gly Asn Thr Thr Val Pro Pro
      85             90             95
Leu Asn Asp Asp Leu Asp Ile Phe Gly Pro Met Ile Ser Asn Pro Leu
      100            105            110
Pro Ala Thr Val Met Pro Pro Ala Gln Ala Thr Pro Ser Ala Pro Ala
      115            120            125
Ala Ala Thr Leu Ser Thr Val Thr Ser Gly Asp Leu Asp Leu Phe Thr
      130            135            140
Glu Gln Thr Thr Lys Ser Glu Glu Val Ala Lys Lys Gln Leu Ser Lys
      145            150            155            160
Asp Ser Ile Leu Ser Leu Tyr Gly Thr Gly Thr Ile Gln Gln Gln Ser
      165            170            175
Thr Pro Gly Val Phe Met Gly Pro Thr Asn Ile Pro Phe Thr Ser Gln
      180            185            190
Ala Pro Ala Ala Phe Gln Gly Phe Pro Ser Met Gly Val Pro Val Pro
      195            200            205
Ala Ala Pro Gly Leu Ile Gly Asn Val Met Gly Gln Ser Pro Ser Met
      210            215            220
Met Val Gly Met Pro Met Pro Asn Gly Phe Met Gly Asn Ala Gln Thr
      225            230            235            240

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<211> 209

<213> Homo sapiens

Met	Pro	Gly	Ser	Cys	Ala	Glu	Met	Arg	Thr	Cys	Ile	Leu	Ala	Gly	His
1				5					10					15	
Gly	Gly	Ser	Leu	Ser	Asn	Leu	Met	Asp	Phe	Val	Lys	Lys	Thr	Gly	Ile
			20					25					30		
Cys	Ala	Ser	Lys	Trp	Glu	Trp	Gly	Thr	Thr	His	Asn	Phe	Leu	Tyr	Lys
		35					40					45			
His	Gly	Gly	Ile	Arg	Asp	Lys	Ile	Met	Ser	Ser	Arg	Lys	His	Leu	His
	50					55					60				
Leu	Val	Asp	Ala	Gly	Leu	Ala	Ile	Asn	Thr	Pro	Phe	Pro	Leu	Val	Leu
65				70					75				80		
Pro	Pro	Thr	Arg	Glu	Val	His	Leu	Ile	Leu	Ser	Phe	Asp	Phe	Ser	Ala
			85						90				95		
Gly	Asp	Pro	Phe	Glu	Thr	Ile	Arg	Ala	Thr	Thr	Asp	Tyr	Cys	Arg	Arg
		100						105				110			
His	Lys	Ile	Pro	Phe	Pro	Gln	Val	Glu	Glu	Ala	Glu	Leu	Asp	Leu	Trp
	115					120					125				

Ser Lys Ala Pro Ala Ser Cys Tyr Ile Leu Lys Gly Glu Thr Gly Pro
 130 135 140
 Val Val Met His Phe Pro Leu Phe Asn Ile Asp Ala Cys Gly Gly Asp
 145 150 155 160
 Ile Glu Ala Trp Ser Asp Thr Tyr Asp Thr Phe Lys Leu Ala Asp Thr
 165 170 175
 Tyr Thr Leu Asp Val Val Val Leu Leu Leu Ala Leu Ala Lys Lys Asn
 180 185 190
 Val Arg Glu Asn Lys Lys Lys Ile Leu Arg Glu Leu Met Asn Val Ala
 195 200 205
 Gly

<210> 4121

<211> 168

<212> PRT

<213> Homo sapiens

<400> 4121

Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg
 1 5 10 15
 Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala
 20 25 30
 Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His
 35 40 45
 Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp
 50 55 60
 Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg
 65 70 75 80
 Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg
 85 90 95
 Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp
 100 105 110
 Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val
 115 120 125

Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr
 130 135 140
 Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe
 145 150 155 160
 Thr Asn Lys Ser Asp Trp Ser Ile
 165

<210> 4122

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4122

Met Asn Pro Gln Ala Trp Thr Gly Ala Pro Glu Glu Ala His Thr Leu
 1 5 10 15
 Leu Leu Ser Leu Leu Leu Ile Phe Ser Val Trp Leu His Leu Cys His
 20 25 30
 Ser Cys Cys Thr Asp Leu Cys Met Pro Gly Lys Ala Lys Leu Ala Gln
 35 40 45
 Lys Ala Thr Gly His Leu Cys Lys Val Val Pro Gly Ala Gly Gly Pro
 50 55 60
 Ala Thr Asn Leu Thr Cys Cys Arg Ser Ala Tyr Ile Ser Ser Ser Thr
 65 70 75 80
 Leu Glu Val Gly Pro Gln Cys His Met Leu Phe Leu Arg Pro Leu Leu
 85 90 95
 Tyr Gln Ser Ser Gly Ser Asn His Ser Gly Cys Gly Asn Leu Ala Ile
 100 105 110
 Pro Pro Ser Leu Ser Ser
 115

<210> 4123

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4123

Met Val Leu Cys His Arg Gly Phe Tyr Tyr Tyr Asn Ile Lys Leu Glu
 1 5 10 15
 Val Val Leu Val Pro Gly Val Cys Ser Glu Phe Pro Glu Glu Arg Glu
 20 25 30
 Gly Gln Gly Leu Asn Gly Met Gln Asp Asn Trp Asn Ala Pro Ile Ser
 35 40 45
 Leu Ala Asp Thr Asp Pro Val Ile Pro Gly Ala Gly Arg Asp Leu Glu
 50 55 60
 Ala Leu Val Ile Cys Arg Val Asn Gly Glu Gly Arg Gly Lys Gly Leu
 65 70 75 80
 Leu Gly Gly Lys Thr Gly Cys Arg Gly Glu Ala Glu Gly Gly Gly Ala
 85 90 95
 Glu Ala Ala Gly Leu Cys Leu Trp
 100

<210> 4124

<211> 138

<212> PRT

<213> Homo sapiens

<400> 4124

Met Pro Asp Cys Arg Arg Tyr Gln Gln Pro Val Glu Lys Leu His Gln
 1 5 10 15
 Cys Trp Gly Ser Tyr Phe Asn Tyr Ser Arg Lys Ile His Phe Leu Leu
 20 25 30
 Ser Val Trp Phe His Leu Gly Leu Thr Ser Phe Leu Ala Gly Pro Arg
 35 40 45
 Phe Val Lys Ser Ile Leu Ile Ser Arg Ile Ile Leu Ala Asn Ser Leu
 50 55 60
 Pro Arg Phe Ser Phe Pro Ser Phe Gly Gln Leu Ala Trp Phe Val Leu
 65 70 75 80
 Leu Ile Ser Glu Met Arg Cys Asp Asn Lys Arg Gln Arg Asn Lys Ser
 85 90 95

Met Phe Leu Ala Phe Gly Phe Arg Ser Cys Pro Tyr Gly Lys Glu Lys
 100 105 110
 Thr Asn Lys Cys Gly Ile Asp Lys Ile Phe Gly Arg Lys Asp Asn Lys
 115 120 125
 Ser Arg Lys Glu Phe Leu Arg Gly Arg Lys
 130 135

<210> 4125

<211> 234

<212> PRT

<213> Homo sapiens

<400> 4125

Met Gln Gly Ser Arg Arg Asp Cys Arg Met Tyr Ala Thr Ala Thr Gly
 1 5 10 15
 Pro Gly Phe Ser Gly Leu Pro Trp Ala Val His His Pro Leu His Ser
 20 25 30
 Pro Ser His Cys Tyr Pro Thr Ser Ala Val Arg Ser Pro Arg Ala His
 35 40 45
 Ser Ala Gln Pro Pro Ser Ser Val Pro Ser Gly Pro Phe Thr Pro Cys
 50 55 60
 Asp Asn Ser Arg Cys Cys Leu Gly Ser Trp Gly Thr Pro Asp Pro Ser
 65 70 75 80
 Ser His Gly Ile Ser Ser Arg His Ala Gly Gln Ala Gly Pro Met Ala
 85 90 95
 Leu His Leu Ser Pro Ala Ala Trp Gly Cys Pro Val Gly Ala Asp Thr
 100 105 110
 Thr Ser Leu Pro Phe Gly Pro Leu Pro Arg Thr His Cys Met Pro Gly
 115 120 125
 Trp Gly Asp Gly Gly Arg Glu Lys Ser Gly Arg Phe Pro Ser Trp Arg
 130 135 140
 Gly Ser Ala Arg Ala Gly Arg Cys Pro Gly Met Thr Ile Pro Asp Ser
 145 150 155 160
 Gln Asn His Leu Pro Ala Val Gly Trp Gly Ser Pro Gln Arg Ala His
 165 170 175

Pro Tyr Ser Gln Ser Arg Asp Glu Gly Ser Cys Gly Pro Arg Arg Trp
 180 185 190
 Ala Lys Arg Arg Thr Gly Ser Trp Met Gln Ser Gly Val Ser Gly Ala
 195 200 205
 Pro Gly Gln Arg His Arg Ala Tyr Trp Gly Gln Gly Trp Gly Glu Met
 210 215 220
 Gly Leu Ser Pro Arg Asp Leu Gly Arg Ser
 225 230

<210> 4126

<211> 103

<212> PRT

<213> Homo sapiens

<400> 4126

Met Glu Pro Arg Ser Gly Gly Leu Arg Ser His Lys Ala Tyr Ala Cys
 1 5 10 15
 Ile Phe Leu Arg Glu Pro Thr Glu Glu Arg Glu Met Ala Lys Thr Arg
 20 25 30
 Arg Asp Arg Trp Met Thr Thr Ser Ala Gly Gln Lys Thr Thr Leu Ile
 35 40 45
 Ala Phe Met Arg Met Thr Ala Ser Pro Ser Gln Lys Ala Thr Leu Ile
 50 55 60
 Ala Ser Met Arg Met Thr Ala Ser Pro Gly Gln Lys Thr Thr Leu Ile
 65 70 75 80
 Ala Ser Met Ser Ser Pro Trp Gly Ile His Gly Glu Asp Ile Phe Glu
 85 90 95
 Gly Glu Ile Pro Asn Ala Ser
 100

<210> 4127

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4127

Met Arg Pro Ser Met Ile Trp Val Leu Ser Ala Ser Pro Ala Ser Pro
 1 5 10 15
 Asp Val Pro Gly Gly Ser Ala Leu Val Asn Pro Cys Ser Leu Leu Ala
 20 25 30
 Thr Arg Cys Ser Leu Arg Pro Leu Pro Thr Thr Gln Asn Ala Ile Tyr
 35 40 45
 Leu Leu Pro Ser Thr Leu Pro Pro Cys Pro Arg Pro Ile Pro Ile Pro
 50 55 60
 Gln Leu Thr Ser Cys Pro Phe Ile Lys Ile Ala Leu Ala Met Pro Ser
 65 70 75 80
 Gln Glu Ile Ser Asn Pro Tyr Gly Leu Leu Gly Ala Pro Leu Leu Glu
 85 90 95
 Ala Ala Lys Asp Thr Asp Leu Phe Ser Arg Cys Ala Trp Ile
 100 105 110

<210> 4128

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4128

Met Leu Pro Asn Tyr Met Lys Gln Thr Ile Tyr Gly His Asn Thr Thr
 1 5 10 15
 Ile Phe Asn Glu His Leu Tyr Ile Leu Tyr Ala Thr Val Leu Ser Leu
 20 25 30
 Cys Leu Pro Cys Ala Lys Ser Thr Val Phe Asn Asp Leu Lys Leu Thr
 35 40 45
 Phe Ala Asn Asn Ser Lys Tyr Arg Trp Ser Ser Ser Ser Lys Thr Thr
 50 55 60
 Lys Gly Ser Phe Leu Ser Met Val Ile Phe Ser Pro Phe Lys Leu Ile
 65 70 75 80
 Leu Tyr Lys Gln Asp Phe Lys Ser Lys Ser His Phe Phe Arg Cys Arg
 85 90 95

His Pro Cys Gly Trp Glu Arg Ile

100

<210> 4129

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4129

Met Pro Ser Arg Cys Pro Gly Pro His Pro Ser Ala Arg His Pro Pro

1 5 10 15

Ser Gly Leu Pro Gly Leu Leu Gly Ser Pro Val Phe Pro Asp Arg Gln

20 25 30

Gly Leu Asp Val Pro Ser Gln Pro Ala Pro Gly Pro Thr Cys Arg Ser

35 40 45

Tyr Pro Asn Ala Leu Arg Ser Pro Ala Leu Pro Leu Cys Phe His Pro

50 55 60

Pro Ser Phe Leu Met Val Phe Phe Leu Pro His Cys Leu Ser Leu Cys

65 70 75 80

Leu Ser Val Leu Ser Val Pro Ser Pro Pro Val Ser Pro Ser Ala Leu

85 90 95

Tyr Gly Pro Leu Val Ser Leu Ser Thr Ser Leu Tyr His His Val Ile

100 105 110

Ser Val Ser Leu Ser Val Ser Ile Ser Pro Cys Leu Cys Leu Leu Cys

115 120 125

Leu Ile Phe Leu

130

<210> 4130

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4130

Met Asn Lys Ile Arg Leu Ser Leu Lys Arg Asn Tyr Lys Lys Glu Leu
 1 5 10 15
 Arg Pro Gly Val Met Ala His Ala Gly Asn Pro Ser Thr Leu Gly Gly
 20 25 30
 Gln Gly Ser Trp Ile Met Arg Ser Gly Val Arg Asp Gln Pro Gly Gln
 35 40 45
 His Gly Glu Thr Ser Ser Leu Leu Lys Ile Gln Glu Leu Ala Gly Cys
 50 55 60
 Gly Gly Met Pro Val Phe Pro Ala Thr Gln Glu Gly Lys Ala Gly Glu
 65 70 75 80
 Ser Leu Glu Pro Arg Arg Trp Arg Leu Gln Cys Thr Gln Ile Ala Pro
 85 90 95
 Leu His Ser Ser Leu Gly Asp Arg Ala Arg Leu Leu Glu Lys Lys Gly
 100 105 110
 Ala Glu Met Lys Phe
 115

<210> 4131

<211> 143

<212> PRT

<213> Homo sapiens

<400> 4131

Met Met Pro Gly Met Ala Thr Leu Met Ala Asp Ser Met Cys Asp Asp
 1 5 10 15
 Ser Tyr Ser Ser Cys Gly Arg Gln Ser Ile Ser Ser Ser Arg Ser Leu
 20 25 30
 Pro Ser Ser Ser Cys Ser Leu Ser His Ala Thr Val Leu Leu Ile Ala
 35 40 45
 Ile Ser Asp Ala Lys Gly Thr Gly Leu Ser Val Ser Ile Met Gly Val
 50 55 60
 Glu Leu Arg Glu Arg Ala Gly Cys Leu Pro Asp Ala Pro Arg Gly Arg
 65 70 75 80
 His Arg Pro Ser Ala Pro Arg Ala Lys Leu Pro Leu Ser Glu Arg Gly
 85 90 95

Leu Ile Pro Pro Arg Leu Thr Gln Ala Glu Ala Ser Gly Trp Gly Arg
 100 105 110
 Arg Asp Arg Ser Lys Ala Gly Gly Ser Leu Cys Thr Gln Leu Gln Pro
 115 120 125
 Leu Ala Leu Ser Val Asn Glu Ser Leu Ser Met Lys Leu Pro Arg
 130 135 140

<210> 4132

<211> 140

<212> PRT

<213> Homo sapiens

<400> 4132

Met Glu Ala Ser Pro Tyr Leu Glu Gly Pro Leu Ser Gly Arg Pro Cys
 1 5 10 15
 Trp Leu His Arg Gly Gly Ser Glu Asp Asn Pro Ser Leu Gly Gly Ala
 20 25 30
 His His Cys Cys Leu Gly His Ser Gln Glu Cys Tyr Ser Arg Pro Thr
 35 40 45
 Ala Gly His Leu Ala Gly Thr Gly Ser Pro Arg Ile Trp Pro Arg Trp
 50 55 60
 Gly Arg Val Pro Pro Arg Ser Phe Ser Leu Ser Ser Ala Ser Val Pro
 65 70 75 80
 Ser Pro His Leu Leu Cys Thr Arg Ile Thr Ala Ser Arg Glu Arg Met
 85 90 95
 Ala Leu Arg Leu Gly Phe Cys Phe Gln Pro Ser Ser Glu Arg Gly Ser
 100 105 110
 Thr Tyr Arg Lys Gln Tyr Ile Ser His Gln Ser Leu Arg Asp Pro Gln
 115 120 125
 Ala Gln Leu Thr Pro Thr Pro Gly Ala Pro Ala Phe
 130 135 140

<210> 4133

<211> 208

<212> PRT

<213> Homo sapiens

<400> 4133

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Met Gly Ser Cys Ser Gly Arg Cys Ala Leu Val Val Leu Cys Ala Phe
  1              5              10              15
Gln Leu Val Ala Ala Leu Glu Arg Gln Val Phe Asp Phe Leu Gly Tyr
      20              25              30
Gln Trp Ala Pro Ile Leu Ala Asn Phe Val His Ile Ile Ile Val Ile
      35              40              45
Leu Gly Leu Phe Gly Thr Ile Gln Tyr Arg Leu Arg Tyr Val Met Val

      50              55              60
Tyr Thr Leu Trp Ala Ala Val Trp Val Thr Trp Asn Val Phe Ile Ile
  65              70              75              80
Cys Phe Tyr Leu Glu Val Gly Gly Leu Leu Gln Asp Ser Glu Leu Leu
      85              90              95
Thr Phe Ser Leu Ser Arg His Arg Ser Trp Trp Arg Glu Arg Trp Pro
      100             105             110
Gly Cys Leu His Glu Glu Val Pro Ala Val Gly Leu Gly Ala Pro His
      115             120             125
Gly Gln Ala Leu Val Ser Gly Ala Gly Cys Ala Leu Glu Pro Ser Tyr
      130             135             140
Val Glu Ala Leu His Ser Gly Leu Gln Ile Leu Ile Ala Leu Leu Gly
      145             150             155             160
Phe Val Cys Gly Cys Gln Val Val Ser Val Phe Thr Glu Glu Glu Asp
      165             170             175
Ser Phe Asp Phe Ile Gly Gly Phe Asp Pro Phe Pro Leu Tyr His Val
      180             185             190
Asn Glu Lys Pro Ser Ser Leu Leu Ser Lys Gln Val Tyr Leu Pro Ala
      195             200             205

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<210> 4134

<211> 159

<212> PRT

<213> Homo sapiens

<400> 4134

Met Cys Val Arg Arg Ser Leu Val Gly Leu Thr Phe Cys Thr Cys Tyr
 1 5 10 15
 Leu Ala Ser Tyr Leu Thr Asn Lys Tyr Val Leu Ser Val Leu Lys Phe
 20 25 30
 Thr Tyr Pro Thr Leu Phe Gln Gly Trp Gln Thr Leu Ile Gly Gly Leu
 35 40 45
 Leu Leu His Val Ser Trp Lys Leu Gly Trp Val Glu Ile Asn Ser Ser
 50 55 60
 Ser Arg Ser His Val Leu Val Trp Leu Pro Ala Ser Val Leu Phe Val
 65 70 75 80
 Gly Ile Ile Tyr Ala Gly Ser Arg Ala Leu Ser Arg Leu Ala Ile Pro
 85 90 95
 Val Phe Leu Thr Leu His Asn Val Ala Glu Val Ile Ile Cys Gly Tyr
 100 105 110
 Gln Lys Cys Phe Gln Lys Glu Lys Thr Ser Pro Ala Lys Ile Cys Ser
 115 120 125
 Ala Leu Phe Leu Leu Ala Ala Ala Gly Cys Leu Pro Phe Asn Asp Ser
 130 135 140
 Gln Gly Leu Ile Lys Phe Tyr Arg Ser Pro Arg Asn Pro Val His
 145 150 155

<210> 4135

<211> 942

<212> PRT

<213> Homo sapiens

<400> 4135

Met Glu Arg Leu Leu Arg Arg Ile Asn Arg Thr Val Ile Gly Met Asn
 1 5 10 15
 Arg Gln Ser Pro His Ile Gly Ser Phe Val Ala Cys Met Ile Ala Leu
 20 25 30
 Leu Gln Gln Met Asp Asp Ser His Tyr Ser His Tyr Ile Ser Thr Phe

35	40	45
Lys Thr Arg Gln Asp Ile Ile Asp Phe Leu Leu Glu Thr Phe Ile Met		
50	55	60
Phe Lys Asp Leu Ile Gly Lys Asn Val Tyr Ala Lys Asp Trp Met Val		
65	70	75
80		
Met Asn Met Thr Gln Asn Arg Val Phe Leu Arg Ala Ile Asn Gln Phe		
85	90	95
Ala Glu Val Leu Thr Arg Phe Phe Met Asp Gln Ala Ser Phe Glu Leu		
100	105	110
Gln Leu Trp Asn Asn Tyr Phe His Leu Ala Val Ala Phe Leu Thr His		
115	120	125
Glu Ser Leu Gln Leu Glu Thr Phe Ser Gln Ala Lys Arg Asn Lys Ile		
130	135	140
Val Lys Lys Tyr Gly Asp Met Arg Lys Glu Ile Gly Phe Arg Ile Arg		
145	150	155
160		
Asp Met Trp Tyr Asn Leu Gly Pro His Lys Ile Lys Phe Ile Pro Ser		
165	170	175
Met Val Gly Pro Ile Leu Glu Val Thr Leu Thr Pro Glu Val Glu Leu		
180	185	190
Arg Lys Ala Thr Ile Pro Ile Phe Phe Asp Met Met Gln Cys Glu Phe		
195	200	205
Asn Phe Ser Gly Asn Gly Asn Phe His Met Phe Glu Asn Glu Leu Ile		
210	215	220
Thr Lys Leu Asp Gln Glu Val Glu Glu Gly Arg Gly Asp Glu Gln Tyr		
225	230	235
240		
Lys Val Leu Leu Glu Lys Leu Leu Leu Glu His Cys Arg Lys His Lys		
245	250	255
Tyr Leu Ser Ser Ser Gly Glu Val Phe Ala Leu Leu Val Ser Ser Leu		
260	265	270
Leu Glu Asn Leu Leu Asp Tyr Arg Thr Ile Ile Met Gln Asp Glu Ser		
275	280	285
Lys Glu Asn Arg Met Ser Cys Thr Val Asn Val Leu Asn Phe Tyr Lys		
290	295	300
Glu Lys Lys Arg Glu Asp Ile Tyr Ile Arg Tyr Leu Tyr Lys Leu Arg		
305	310	315
320		
Asp Leu His Arg Asp Cys Glu Asn Tyr Thr Glu Ala Ala Tyr Thr Leu		

	325		330		335										
Leu	Leu	His	Ala	Glu	Leu	Leu	Gln	Trp	Ser	Asp	Lys	Pro	Cys	Val	Pro
	340						345						350		
His	Leu	Leu	Gln	Arg	Asp	Ser	Tyr	Tyr	Val	Tyr	Thr	Gln	Gln	Glu	Leu
	355						360						365		
Lys	Glu	Lys	Leu	Tyr	Gln	Glu	Ile	Ile	Ser	Tyr	Phe	Asp	Lys	Gly	Lys
	370						375						380		
Met	Trp	Glu	Lys	Ala	Ile	Lys	Leu	Ser	Lys	Glu	Leu	Ala	Glu	Thr	Tyr
385					390					395					400
Glu	Ser	Lys	Val	Phe	Asp	Tyr	Glu	Gly	Leu	Gly	Asn	Leu	Leu	Lys	Lys
			405						410					415	
Arg	Ala	Ser	Phe	Tyr	Glu	Asn	Ile	Ile	Lys	Ala	Met	Arg	Pro	Gln	Pro
	420								425					430	
Glu	Tyr	Phe	Ala	Val	Gly	Tyr	Tyr	Gly	Gln	Gly	Phe	Pro	Ser	Phe	Leu
	435							440						445	
Arg	Asn	Lys	Ile	Phe	Ile	Tyr	Arg	Gly	Lys	Glu	Tyr	Glu	Arg	Arg	Glu
	450								455					460	
Asp	Phe	Ser	Leu	Arg	Leu	Leu	Thr	Gln	Phe	Pro	Asn	Ala	Glu	Lys	Met
465					470					475					480
Thr	Ser	Thr	Thr	Pro	Pro	Gly	Glu	Asp	Ile	Lys	Ser	Ser	Pro	Lys	Gln
			485						490					495	
Tyr	Met	Gln	Cys	Phe	Thr	Val	Lys	Pro	Val	Met	Ser	Leu	Pro	Pro	Ser
	500							505						510	
Tyr	Lys	Asp	Lys	Pro	Val	Pro	Glu	Gln	Ile	Leu	Asn	Tyr	Tyr	Arg	Ala
	515							520						525	
Asn	Glu	Val	Gln	Gln	Phe	Arg	Tyr	Ser	Arg	Pro	Phe	Arg	Lys	Gly	Glu
	530							535						540	
Lys	Asp	Pro	Asp	Asn	Glu	Phe	Ala	Thr	Met	Trp	Ile	Glu	Arg	Thr	Thr
545					550					555					560
Tyr	Thr	Thr	Ala	Tyr	Thr	Phe	Pro	Gly	Ile	Leu	Lys	Trp	Phe	Glu	Val
			565						570					575	
Lys	Gln	Ile	Ser	Thr	Glu	Glu	Ile	Ser	Pro	Leu	Glu	Asn	Ala	Ile	Glu
	580							585						590	
Thr	Met	Glu	Leu	Thr	Asn	Glu	Arg	Ile	Ser	Asn	Cys	Val	Gln	Gln	His
	595							600						605	
Ala	Trp	Asp	Arg	Ser	Leu	Ser	Val	His	Pro	Leu	Ser	Met	Leu	Leu	Ser

610	615	620
Gly Ile Val Asp Pro Ala Val Met Gly Gly Phe Ser Asn Tyr Glu Lys		
625	630	635
Ala Phe Phe Thr Glu Lys Tyr Leu Gln Glu His Pro Glu Asp Gln Glu		640
	645	650
Lys Val Glu Leu Leu Lys Arg Leu Ile Ala Leu Gln Met Pro Leu Leu		655
	660	665
Thr Glu Gly Ile Arg Ile His Gly Glu Lys Leu Thr Glu Gln Leu Lys		670
	675	680
Pro Leu His Glu Arg Leu Ser Ser Cys Phe Arg Glu Leu Lys Glu Lys		685
	690	695
Val Glu Lys His Tyr Gly Val Ile Thr Leu Pro Pro Asn Leu Thr Glu		700
705	710	715
Arg Lys Gln Ser Arg Thr Gly Ser Ile Val Leu Pro Tyr Ile Met Ser		720
	725	730
Ser Thr Leu Arg Arg Leu Ser Ile Thr Ser Val Thr Ser Ser Val Val		735
	740	745
Ser Thr Ser Ser Asn Ser Ser Asp Asn Ala Pro Ser Arg Pro Gly Ser		750
	755	760
Asp Gly Ser Ile Leu Glu Pro Leu Leu Glu Arg Arg Ala Ser Ser Gly		765
	770	775
Ala Arg Val Glu Asp Leu Ser Leu Arg Glu Glu Asn Ser Glu Asn Arg		780
785	790	795
Ile Ser Lys Phe Lys Arg Lys Asp Trp Ser Leu Ser Lys Ser Gln Val		800
	805	810
Ile Ala Glu Lys Ala Pro Glu Pro Asp Leu Met Ser Pro Thr Arg Lys		815
	820	825
Ala Gln Arg Pro Lys Ser Leu Gln Leu Met Asp Asn Arg Leu Ser Pro		830
	835	840
Phe His Gly Ser Ser Pro Pro Gln Ser Thr Pro Leu Ser Pro Pro Pro		845
	850	855
Leu Thr Pro Lys Ala Thr Arg Thr Leu Ser Ser Pro Ser Leu Gln Thr		860
865	870	875
Asp Gly Ile Ala Ala Thr Pro Val Pro Pro Pro Pro Pro Lys Ser		880
	885	890
		895

Lys Pro Tyr Glu Gly Ser Gln Arg Ser Ser Thr Glu Leu Ala Pro Pro
 900 905 910
 Leu Pro Val Arg Arg Glu Ala Lys Ala Pro Pro Pro Pro Pro Pro Lys
 915 920 925
 Ala Arg Lys Ser Gly Ile Pro Thr Ser Glu Pro Gly Ser Gln
 930 935 940

<210> 4136

<211> 144

<212> PRT

<213> Homo sapiens

<400> 4136

Met Ala His Leu Arg Asp His Pro Phe Ser Asn Thr Arg Leu Pro Lys
 1 5 10 15
 Pro Trp His Arg Asp Gly Cys Leu Gly Trp Pro Arg Arg Asp Ser Arg
 20 25 30
 Ser Val Leu Cys Gly Asp Leu Leu Ser Ala Gln Lys Leu Val Leu Thr
 35 40 45
 Leu Pro Leu Thr Gly Val Trp Cys Phe Trp Ser Gly Leu Phe Leu Gln
 50 55 60
 Gly Cys Pro Ser Val Ser Val Pro Met Gly Val Cys Pro Ala Cys Ser
 65 70 75 80
 Tyr Arg Glu Gln Asp Cys Trp Ala Pro Gly Met Arg Ala Arg Gly Trp
 85 90 95
 Pro Asn Thr Glu Trp Leu Pro Ala Val Ile Leu Ser Val Leu Phe Pro
 100 105 110
 Pro Gln Ser Ser Trp Gln Glu Ser Val Leu Leu Ala Ala Phe Phe Val
 115 120 125
 Arg Ile Tyr Trp Asp Leu Phe Lys Val Pro Trp Gly Pro Arg Arg Leu
 130 135 140

<210> 4137

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4137

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Met Leu Phe Phe Phe Phe Phe Phe Phe Glu Met Glu Ser Cys Phe
  1             5             10             15
Val Ala Gln Ala Glu Val Gln Trp His Asp Leu Gly Ser Leu Leu Pro
          20             25             30
Leu Pro Pro Gly Phe Lys Gln Phe Phe Cys Leu Ser Leu Pro Ser Ser
          35             40             45
Trp Asp Cys Arg Cys Ala Pro Thr Cys Thr Thr Val Gln Ile Pro Gly
          50             55             60
Cys Leu Phe Ser Gly Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser
          65             70             75             80
Arg Thr Pro Asp Leu Arg Trp Ser Thr Cys Phe Ser Leu Pro Gly Cys
          85             90             95
Trp Asn Cys Arg Cys Glu Pro Pro Cys Gln Thr Asp Ala Phe Tyr Val
          100             105             110

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<210> 4138

<211> 531

<212> PRT

<213> Homo sapiens

<400> 4138

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Met Leu Lys Leu Ile Pro Pro His Ala Arg Glu Ala Gly Thr Arg Gly
  1             5             10             15
Gly Thr Asp Thr Ala Gly Glu Pro Thr Pro Glu Val Arg Pro Gly Asp
          20             25             30
Val His Ser His Ile Pro Lys Ala His Gly Met Arg Ser Ala Trp Val
          35             40             45
Thr Leu Gly Leu Cys Pro Pro Arg Gln Glu Pro Ala Leu Cys Thr Leu
          50             55             60
Cys Ala Cys Pro Ser Gly Arg Pro Ser Met Arg Gly Pro Ala Val Leu
          65             70             75             80

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Leu Thr Val Ala Leu Ala Thr Leu Leu Ala Pro Gly Ala Gly Ala Pro
 85 90 95
 Val Gln Ser Gln Gly Ser Gln Asn Lys Leu Leu Leu Val Ser Phe Asp
 100 105 110
 Gly Phe Arg Trp Asn Tyr Asp Gln Asp Val Asp Thr Pro Asn Leu Asp
 115 120 125
 Ala Met Ala Arg Asp Gly Val Lys Ala Arg Tyr Met Thr Pro Ala Phe
 130 135 140
 Val Thr Met Thr Ser Pro Cys His Phe Thr Leu Val Thr Gly Lys Tyr
 145 150 155 160
 Ile Glu Asn His Gly Val Val His Asn Met Tyr Tyr Asn Thr Thr Ser
 165 170 175
 Lys Val Lys Leu Pro Tyr His Ala Thr Leu Gly Ile Gln Arg Trp Trp
 180 185 190
 Asp Asn Gly Ser Val Pro Ile Trp Ile Thr Ala Gln Arg Gln Gly Leu
 195 200 205
 Arg Ala Gly Ser Phe Phe Tyr Pro Gly Gly Asn Val Thr Tyr Gln Gly
 210 215 220
 Val Ala Val Thr Arg Ser Arg Lys Glu Gly Ile Ala His Asn Tyr Lys
 225 230 235 240
 Asn Glu Thr Glu Trp Arg Ala Asn Ile Asp Thr Val Met Ala Trp Phe
 245 250 255
 Thr Glu Glu Asp Leu Asp Leu Val Thr Leu Tyr Phe Gly Glu Pro Asp
 260 265 270
 Ser Thr Gly His Arg Tyr Gly Pro Glu Ser Pro Glu Arg Arg Glu Met
 275 280 285
 Val Arg Gln Val Asp Arg Thr Val Gly Tyr Leu Arg Glu Ser Ile Ala
 290 295 300
 Arg Asn His Leu Thr Asp Arg Leu Asn Leu Ile Ile Thr Ser Asp His
 305 310 315 320
 Gly Met Thr Thr Val Asp Lys Arg Ala Gly Asp Leu Val Glu Phe His
 325 330 335
 Lys Phe Pro Asn Phe Thr Phe Arg Asp Ile Glu Phe Glu Leu Leu Asp
 340 345 350
 Tyr Gly Pro Asn Gly Met Leu Leu Pro Lys Glu Gly Arg Leu Glu Lys
 355 360 365

Val Tyr Asp Ala Leu Lys Asp Ala His Pro Lys Leu His Val Tyr Lys
 370 375 380
 Lys Glu Ala Phe Pro Glu Ala Phe His Tyr Ala Asn Asn Pro Arg Val
 385 390 395 400
 Thr Pro Leu Leu Met Tyr Ser Asp Leu Gly Tyr Val Ile His Gly Arg
 405 410 415
 Ile Asn Val Gln Phe Asn Asn Gly Glu His Gly Phe Asp Asn Lys Asp
 420 425 430
 Met Asp Met Lys Thr Ile Phe Arg Ala Val Gly Pro Ser Phe Arg Ala
 435 440 445
 Gly Leu Glu Val Glu Pro Phe Glu Ser Val His Val Asn Glu Leu Met
 450 455 460
 Cys Arg Leu Leu Gly Ile Val Pro Glu Ala Asn Asp Gly His Leu Ala
 465 470 475 480
 Thr Leu Leu Pro Met Leu His Thr Glu Ser Ala Leu Pro Pro Asp Gly
 485 490 495
 Arg Pro Thr Leu Leu Pro Lys Gly Arg Ser Ala Leu Pro Pro Ser Ser
 500 505 510
 Arg Pro Leu Leu Val Met Gly Leu Leu Gly Thr Val Ile Leu Leu Ser
 515 520 525
 Glu Val Ala
 530

<210> 4139

<211> 270

<212> PRT

<213> Homo sapiens

<400> 4139

Met Thr Thr Leu Ser Asn Arg Asn Lys Tyr Leu Ser Cys Leu Val Trp
 1 5 10 15
 Leu Thr Met Asp Arg Thr Phe Ser Ser Pro Ser Ile Phe Gly Leu Pro
 20 25 30
 Asn Ser Ser Ser Phe Thr Cys Trp Glu Gly Glu Gly Pro Ser Ala Gly
 35 40 45

Ala Gly Ala Ala Pro Val Leu Leu Thr Ala Arg Ala Gly Gln Thr Val
 50 55 60
 Val His Pro Arg Glu Leu Pro Thr Gly Ser Arg Gly Gly Thr Lys Gly
 65 70 75 80
 Asn Ser Pro Cys Gly Ser Gln Leu Val Leu Arg Met Asp Glu Gly Gly
 85 90 95
 Cys Arg Arg Pro Gly Arg Asp Trp Ala Trp Gln Leu Leu Ser Leu Ser
 100 105 110
 Trp Pro Ala Leu Pro Arg Gly Ser Leu Gln Leu Trp Gly Gln Arg Ala
 115 120 125
 Ile Asp Gly Ala Gly Cys Val His Arg Gly Arg Arg Cys Val Glu Pro
 130 135 140
 Gln Ala Gly Pro Gly Arg Lys Ser Gln Lys Pro Lys Pro His Val Gln
 145 150 155 160
 Glu Arg Thr Asn Ser Ala Tyr Leu Leu Gln Gly Gly Trp Gly Arg Gly
 165 170 175
 Pro Ala Lys Gly Glu Ala Ser Thr Gln Thr Pro Val Trp Phe Ala Glu
 180 185 190
 Val His Phe Arg Cys Leu Ser Gly Phe Val Ser Val Thr Leu Leu Ile
 195 200 205
 Gln Arg Glu Leu Leu Leu Thr Cys Ser Leu Arg Gly Phe Gln Ser Val
 210 215 220
 His Thr Asp Arg Lys Arg Trp Arg Lys Met Leu Gln Asp Thr Asn Arg
 225 230 235 240
 Ala Leu Pro Gly Arg Cys Ser Arg His Arg Leu Ser Val Ser Phe Gln
 245 250 255
 Gly Leu Ser Pro Arg Gly Cys Lys Asp Ser Phe Gly Val Thr
 260 265 270

<210> 4140

<211> 426

<212> PRT

<213> Homo sapiens

<400> 4140

Met	Gly	Glu	Pro	Gly	Gln	Ser	Pro	Ser	Pro	Arg	Ser	Ser	His	Gly	Ser
1				5					10					15	
Pro	Pro	Thr	Leu	Ser	Thr	Leu	Thr	Leu	Leu	Leu	Leu	Leu	Cys	Gly	His
			20					25					30		
Ala	His	Ser	Gln	Cys	Lys	Ile	Leu	Arg	Cys	Asn	Ala	Glu	Tyr	Val	Ser
	35						40					45			
Ser	Thr	Leu	Ser	Leu	Arg	Gly	Gly	Gly	Ser	Ser	Gly	Ala	Leu	Arg	Gly
	50					55					60				
Gly	Gly	Gly	Gly	Gly	Arg	Gly	Gly	Gly	Val	Gly	Ser	Gly	Gly	Leu	Cys
65					70				75					80	
Arg	Ala	Leu	Arg	Ser	Tyr	Ala	Leu	Cys	Thr	Arg	Arg	Thr	Ala	Arg	Thr
			85						90					95	
Cys	Arg	Gly	Asp	Leu	Ala	Phe	His	Ser	Ala	Val	His	Gly	Ile	Glu	Asp
	100							105				110			
Leu	Met	Ile	Gln	His	Asn	Cys	Ser	Arg	Gln	Gly	Pro	Thr	Ala	Pro	Pro
	115							120				125			
Pro	Pro	Arg	Gly	Pro	Ala	Leu	Pro	Gly	Ala	Gly	Ser	Gly	Leu	Pro	Ala
	130					135					140				
Pro	Asp	Pro	Cys	Asp	Tyr	Glu	Gly	Arg	Phe	Ser	Arg	Leu	His	Gly	Arg
145				150					155					160	
Pro	Pro	Gly	Phe	Leu	His	Cys	Ala	Ser	Phe	Gly	Asp	Pro	His	Val	Arg
			165					170				175			
Ser	Phe	His	His	His	Phe	His	Thr	Cys	Arg	Val	Gln	Gly	Ala	Trp	Pro
	180							185				190			
Leu	Leu	Asp	Asn	Asp	Phe	Leu	Phe	Val	Gln	Ala	Thr	Ser	Ser	Pro	Met
	195					200					205				
Ala	Leu	Gly	Ala	Asn	Ala	Thr	Ala	Thr	Arg	Lys	Leu	Thr	Ile	Ile	Phe
	210					215					220				
Lys	Asn	Met	Gln	Glu	Cys	Ile	Asp	Gln	Lys	Val	Tyr	Gln	Ala	Glu	Val
225				230					235					240	
Asp	Asn	Leu	Pro	Val	Ala	Phe	Glu	Asp	Gly	Ser	Ile	Asn	Gly	Gly	Asp
			245					250			255				
Arg	Pro	Gly	Gly	Ser	Ser	Leu	Ser	Ile	Gln	Thr	Ala	Asn	Pro	Gly	Asn
		260						265				270			
His	Val	Glu	Ile	Gln	Ala	Ala	Tyr	Ile	Gly	Thr	Thr	Ile	Ile	Ile	Arg
	275						280					285			

Gln Thr Ala Gly Gln Leu Ser Phe Ser Ile Lys Val Ala Glu Asp Val
 290 295 300
 Ala Met Ala Phe Ser Ala Glu Gln Asp Leu Gln Leu Cys Val Gly Gly
 305 310 315 320
 Cys Pro Pro Ser Gln Arg Leu Ser Arg Ser Glu Arg Asn Arg Arg Gly
 325 330 335
 Ala Ile Thr Ile Asp Thr Ala Arg Arg Leu Cys Lys Glu Gly Leu Pro
 340 345 350
 Val Glu Asp Ala Tyr Phe His Ser Cys Val Phe Asp Val Leu Ile Ser
 355 360 365
 Gly Asp Pro Asn Phe Thr Val Ala Ala Gln Ala Ala Leu Glu Asp Ala
 370 375 380
 Arg Ala Phe Leu Pro Asp Leu Glu Lys Leu His Leu Phe Pro Ser Asp
 385 390 395 400
 Ala Gly Val Pro Leu Ser Ser Ala Thr Leu Leu Ala Pro Leu Leu Ser
 405 410 415
 Gly Leu Phe Val Leu Trp Leu Cys Ile Gln
 420 425

<210> 4141

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4141

Met Tyr Cys Gln Asp Ser Asn Ile Cys Ala Val Phe Ala Val Gln Gly
 1 5 10 15
 Gly Lys Val Gly Arg Lys His Gly Ile Lys Arg Gly Arg Arg Pro Ser
 20 25 30
 Ile Arg Ser Pro Ala Gln Arg Ala Arg Gly Pro Trp Ile His Glu Ser
 35 40 45
 Lys His Pro Ala Phe Ala Lys Gln Gln Ile Asn Leu Glu Met Pro Asn
 50 55 60
 Ser Arg Ala Thr Thr Glu Leu Ala Trp Val Cys Ser Ser Thr Ser Arg
 65 70 75 80

Lys Lys Lys Trp Ala Gly Ser Leu Thr Leu Ser Thr Ala Pro Leu Ser
 85 90 95
 Pro Pro Pro Ser Leu Val His Cys Glu Asp Cys Ser Cys Leu Pro Gly
 100 105 110
 Cys His Ser Gly Asp Leu Tyr Asn Leu Ala Pro Ala Glu Arg Thr Cys
 115 120 125

<210> 4142

<211> 386

<212> PRT

<213> Homo sapiens

<400> 4142

Met Asn Gly Thr Ile Tyr Ser Pro Gly Tyr Pro Asp Glu Tyr Pro Asn
 1 5 10 15
 Phe Gln Asp Cys Phe Trp Leu Val Arg Val Pro Pro Gly Asn Gly Ile
 20 25 30
 Tyr Ile Asn Phe Thr Val Leu Gln Thr Glu Pro Ile Tyr Asp Phe Ile
 35 40 45
 Thr Val Trp Asp Gly Pro Asp Gln Asn Ser Pro Gln Ile Gly Gln Phe
 50 55 60
 Ser Gly Asn Thr Ala Leu Glu Ser Val Tyr Ser Thr Ser Asn Gln Ile
 65 70 75 80
 Leu Ile Lys Phe His Ser Asp Phe Thr Thr Ser Gly Phe Phe Val Leu
 85 90 95
 Ser Tyr His Ala Tyr Gln Leu Arg Val Cys Gln Pro Pro Pro Pro Val
 100 105 110
 Pro Asn Ala Glu Ile Leu Thr Glu Asp Asp Glu Phe Glu Ile Gly Asp
 115 120 125
 Ile Ile Arg Tyr Gln Cys Leu Pro Gly Phe Thr Leu Val Gly Asn Ala
 130 135 140
 Ile Leu Thr Cys Arg Leu Gly Glu Arg Leu Gln Met Asp Gly Ala Pro
 145 150 155 160
 Pro Val Cys Gln Val Leu Cys Pro Ala Asn Glu Leu Arg Leu Asp Ser
 165 170 175

Thr Gly Val Ile Leu Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Asn Leu
 180 185 190
 Gln Met Cys Ala Trp Ser Ile Ser Val Glu Lys Gly Tyr Asn Ile Thr
 195 200 205
 Met Phe Val Glu Phe Phe Gln Thr Glu Lys Glu Phe Asp Val Leu Gln
 210 215 220
 Val Tyr Asp Gly Pro Asn Ile Gln Ser Pro Val Leu Ile Ser Leu Ser
 225 230 235 240
 Gly Asp Tyr Ser Ser Ala Phe Asn Ile Thr Ser Asn Gly His Glu Val
 245 250 255
 Phe Leu Gln Trp Ser Ala Asp His Gly Asn Asn Lys Lys Gly Phe Arg
 260 265 270
 Ile Arg Tyr Ile Ala Phe Tyr Cys Ser Thr Pro Glu Ser Pro Pro His
 275 280 285
 Gly Tyr Ile Ile Ser Gln Thr Gly Gly Gln Leu Asn Ser Val Val Arg
 290 295 300
 Trp Ala Cys Asp Arg Gly Phe Arg Leu Val Gly Lys Ser Ser Ala Val
 305 310 315 320
 Cys Arg Lys Ser Ser Tyr Gly Tyr His Ala Trp Asp Ala Pro Val Pro
 325 330 335
 Ala Cys Gln Gly Glu Val Tyr Tyr Ala Lys Met Asn Lys Asn Met Asn
 340 345 350
 Val Arg Leu Ala Pro Phe Asn Val Phe Ile Trp Ile Thr Asn Phe Ser
 355 360 365
 Glu Asn Gly Asn Ile Arg Lys His Ile Val Asn Ser Phe His Lys Asn
 370 375 380
 Lys Ala
 385

<210> 4143

<211> 164

<212> PRT

<213> Homo sapiens

<400> 4143

Met Leu Val Glu Val Ala Leu Cys Thr Trp Tyr Leu Val Ala Phe Pro
 1 5 10 15
 Pro Glu Val Val Thr Asp Trp His Met Leu Pro Thr Glu Ala Leu Val
 20 25 30
 His Cys Arg Thr Arg Ser Trp Val Ser Phe Gly Leu Ala His Ala Thr
 35 40 45
 Asn Ala Thr Leu Ala Phe Leu Cys Phe Leu Gly Thr Phe Leu Val Arg
 50 55 60
 Ser Gln Pro Gly Arg Tyr Asn Arg Ala Arg Gly Leu Thr Phe Ala Met
 65 70 75 80
 Leu Ala Tyr Phe Ile Thr Trp Val Ser Phe Val Pro Leu Leu Ala Asn
 85 90 95
 Val Gln Val Val Leu Arg Pro Ala Val Gln Met Gly Ala Leu Leu Leu
 100 105 110
 Cys Val Leu Gly Ile Leu Ala Ala Phe His Leu Pro Arg Cys Tyr Leu
 115 120 125
 Leu Met Arg Gln Pro Gly Leu Asn Thr Pro Glu Phe Phe Leu Gly Gly
 130 135 140
 Gly Pro Gly Asp Ala Gln Gly Gln Asn Asp Gly Asn Thr Gly Asn Gln
 145 150 155 160
 Gly Lys His Glu

<210> 4144

<211> 136

<212> PRT

<213> Homo sapiens

<400> 4144

Met Lys Glu Arg Asp Trp Lys Ser Ser Ser His Asn Thr Val Asn Glu
 1 5 10 15
 Glu Leu Pro His Asn Cys Ile Glu Gln Pro Gln Gln Asn Asp Glu Ser
 20 25 30
 Ser Ser Lys Val Arg Thr Ser Ser Asp Met Asn Arg Arg Lys Ser Ile
 35 40 45

Lys Asp His Leu Lys Asn Ala Met Thr Gly Asn Ala Lys Ala Gln Thr
 50 55 60
 Pro Ile Phe Ser Arg Ser Lys Gln Leu Lys Asp Thr Leu Leu Ser Glu
 65 70 75 80
 Glu Ile Asn Val Ala Lys Lys Thr Ile Glu Ser Ser Ser Asn Asp Leu
 85 90 95
 Gly Pro Phe Tyr Ser Leu Pro Ser Lys Val Arg Asp Leu Tyr Ala Gln
 100 105 110
 Phe Lys Gly Ile Glu Lys Leu Tyr Gly Asn Ala Phe Cys Trp Asn Lys
 115 120 125
 Lys Ile Phe Phe Leu Ser Leu Pro
 130 135

<210> 4145

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4145

Met Phe Val Leu Glu Phe Val Glu Pro Trp His Val Asp His Ser Ser
 1 5 10 15
 Leu Gly Ser Ala Asp Ser Gly Leu Gln Ser Leu Ala Ala Val Thr Ala
 20 25 30
 Ala Lys Ala Arg Leu Tyr Ser Arg Arg Ser Leu Leu Ser Leu Ser Trp
 35 40 45
 Thr Leu Pro Leu Ser Ser Arg Val Trp Ala Gly Arg Lys Glu Pro Leu
 50 55 60
 Arg Lys Leu Asp Ser Leu Trp Thr Leu Pro Leu Glu Ile Ala Val Val
 65 70 75 80
 Arg Val Leu Ser Gly Trp Phe Leu Ser Leu Ser Arg Tyr Gln Ala Leu
 85 90 95
 His Trp Leu His Arg Pro Ile Gln Ser Val Val Gln Arg Ile Lys Pro
 100 105 110
 Ser Lys Thr Thr Gln Val
 115

<210> 4146

<211> 404

<212> PRT

<213> Homo sapiens

<400> 4146

```

Met Ile Thr Glu Ala Leu Ala Gln Gly Gly Met His Ile Arg Ala Arg
  1             5             10             15
Phe Pro Pro Thr Thr Ala Val Ser Ala Ile Pro Ser Ser Ser Ile Pro
      20             25             30
Leu Gly Arg Gln Pro Met Ala Gln Val Ser Gln Ser Ser Leu Pro Met
      35             40             45
Leu Ser Ser Pro Ser Pro Gly Gln Gln Val Gln Thr Pro Gln Ser Met
      50             55             60
Pro Pro Pro Pro Gln Pro Ser Pro Gln Pro Gly Gln Pro Ser Ser Gln
      65             70             75             80
Pro Asn Ser Asn Val Ser Ser Gly Pro Ala Pro Ser Pro Ser Ser Phe
      85             90             95
Leu Pro Ser Pro Ser Pro Gln Pro Ser Gln Ser Pro Val Thr Ala Arg
      100            105            110
Thr Pro Gln Asn Phe Ser Val Pro Ser Pro Gly Pro Leu Asn Thr Pro
      115            120            125
Val Asn Pro Ser Ser Val Met Ser Pro Ala Gly Ser Ser Gln Ala Glu
      130            135            140
Glu Gln Gln Tyr Leu Asp Lys Leu Lys Gln Leu Ser Lys Tyr Ile Glu
      145            150            155            160
Pro Leu Arg Arg Met Ile Asn Lys Ile Asp Lys Asn Glu Asp Arg Lys
      165            170            175
Lys Asp Leu Ser Lys Met Lys Ser Leu Leu Asp Ile Leu Thr Asp Pro
      180            185            190
Ser Lys Arg Cys Pro Leu Lys Thr Leu Gln Lys Cys Glu Ile Ala Leu
      195            200            205
Glu Lys Leu Lys Asn Asp Met Ala Val Pro Thr Pro Pro Pro Pro
      210            215            220

```

Val Pro Pro Thr Lys Gln Gln Tyr Leu Cys Gln Pro Leu Leu Asp Ala
 225 230 235 240
 Val Leu Ala Asn Ile Arg Ser Pro Val Phe Asn His Ser Leu Tyr Arg
 245 250 255
 Thr Phe Val Pro Ala Met Thr Ala Ile His Gly Pro Pro Ile Thr Ala
 260 265 270
 Pro Val Val Cys Thr Arg Lys Arg Arg Leu Glu Asp Asp Glu Arg Gln
 275 280 285
 Ser Ile Pro Ser Val Leu Gln Gly Glu Val Ala Arg Leu Asp Pro Lys
 290 295 300
 Phe Leu Val Asn Leu Asp Pro Ser His Cys Ser Asn Asn Gly Thr Val
 305 310 315 320
 His Leu Ile Cys Lys Leu Asp Asp Lys Asp Leu Pro Ser Val Pro Pro
 325 330 335
 Leu Glu Leu Ser Val Pro Ala Asp Tyr Pro Ala Gln Ser Pro Leu Trp
 340 345 350
 Ile Asp Arg Gln Trp Gln Tyr Asp Ala Asn Pro Phe Leu Gln Ser Val
 355 360 365
 His Arg Cys Met Thr Ser Arg Leu Leu Gln Leu Pro Asp Lys His Ser
 370 375 380
 Val Thr Ala Leu Leu Asn Thr Trp Ala Gln Ser Val His Gln Ala Cys
 385 390 395 400
 Leu Thr Ala Ala

<210> 4147

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4147

Met Arg Glu Ile Cys Ile Lys Asn Thr Lys Arg Leu Lys Thr Gly Thr
 1 5 10 15
 Glu Cys Ser Arg Thr Gly Ser Gln Gly Leu Arg Asp Pro Gly Pro Ser
 20 25 30

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4148

Met	Gln	Tyr	Tyr	Gly	Pro	Ala	Thr	Trp	Ala	Asp	Gly	Ser	Trp	Arg	Tyr
1				5					10					15	
Arg	Thr	Pro	Ile	Tyr	Met	Leu	Asn	His	Ile	Ile	Trp	Leu	Gln	Ala	Val
			20					25					30		
Leu	Glu	Ile	Ile	Thr	Asn	Asp	Thr	Ala	Arg	Ala	Leu	Asn	Leu	Leu	Ala
		35					40					45			
Arg	Lys	Ser	Thr	Glu	Met	Arg	Asn	Ala	Val	Tyr	Gln	Asn	Arg	Leu	Ala
	50					55					60				
Leu	Asp	Tyr	Leu	Leu	Ala	Gln	Glu	Gly	Gly	Val	Cys	Arg	Lys	Phe	Ser
65					70					75				80	
Leu	Thr	Asn	Cys	Cys	Leu	Lys	Ile	Asp	Asp	Asn	Gly	Lys	Val	Val	Lys
			85						90					95	
Gln	Lys	Ala	Ala	Arg	Ile	Gln	Lys	Leu	Ala	His	Ile	Pro	Val	Lys	Thr
		100						105					110		

<210> 4149

<211> 116

<212> PRT

<213> Homo sapiens

<400> 4149

```

Met Asp Lys Phe Pro Asn Ala Tyr Thr Leu Pro Arg Leu Asn Gln Glu
  1             5             10             15
Glu Ile Glu Ser Leu Asn Arg Pro Thr Met Ser Ser Glu Val Glu Ala
          20             25             30
Val Ile Asn Ser Ile Pro Thr Lys Lys Gly Pro Gly Pro Asp Gly Phe
          35             40             45
Thr Asp Glu Phe Tyr Gln Met Tyr Lys Glu Glu Leu Val Pro Phe Ile
          50             55             60
Gln Ile Glu Thr Ile Pro Lys Ile Glu Ala Glu Gly Leu Leu Leu Asn
          65             70             75             80
Ser Phe Cys Glu Val Ser Ile Ile Leu Ile Pro Lys Pro Gly Arg His
          85             90             95
Thr Lys Gln Asn Lys Thr Lys Gln Asn Lys Thr Lys Lys Lys Thr Ser
          100            105            110
Asp Gln Tyr Pro
          115

```

<210> 4150

<211> 306

<212> PRT

<213> Homo sapiens

<400> 4150

```

Met Asp Gly Arg Gly Ala Phe Trp Thr Val Ala Ile Pro Arg Ala Arg
  1             5             10             15
Gln Glu Gly Leu Gly Arg Leu Gly Leu Pro Phe Pro Val Lys Arg Thr
          20             25             30
Pro Pro Ala Pro Gln Asn Pro Gly Gly Ser Thr Gln Ala Pro Gln Arg
          35             40             45

```

Val Val Gly Lys Ser His Ser Gly Ile Arg Met Pro Ala Lys Ser Arg
 50 55 60
 Asn Leu Arg Leu Glu Ser Lys Leu Asn Arg Lys Val Val Lys Tyr Lys
 65 70 75 80
 Trp Gly Lys Gln Gly Ser Gly Ala Gly Arg Glu Leu Val Pro Ala Phe
 85 90 95
 Pro Thr Asn Ala Gly Leu Gly Arg Arg Asp Arg Cys Arg Pro Pro Pro
 100 105 110
 Ala Gly Gly Asp Val Ala Ser His Gly Leu Pro Gly Ser Gly Val Gly
 115 120 125
 Tyr Ser Cys Asn Gln Arg Glu Glu Gly Leu Arg Gly Gly Cys Gly Gly
 130 135 140
 Ile Pro His Val Pro Leu Phe Leu Ser Pro Leu Pro Leu Asp Ala Ser
 145 150 155 160
 Gly Gln Arg Pro Ser Ser Thr Tyr Arg Gln Ser Leu Arg Arg Gly Leu
 165 170 175
 Gly Thr Arg Ala His Gln Ser Pro Ala Asn Glu Ile Pro Glu Leu Gly
 180 185 190
 Asp Leu Arg Gly Ser Arg Leu Ala Gln Glu Pro Ala Val Leu Phe Gly
 195 200 205
 Leu Arg Pro Ser Ile Ser Lys Arg Gly Leu Leu Ala Arg Arg Leu Trp
 210 215 220
 Ala Gln Pro Met Leu Leu Ser Gly Trp Val Val Ser Thr Thr Thr Thr
 225 230 235 240
 Ile Ile Thr Val Thr Val Thr Phe Thr Pro Thr Gly Leu Leu Cys Val
 245 250 255
 Lys His Ser Arg Gly Pro Leu Gln Pro Thr Cys Gln Glu Ser Ala Pro
 260 265 270
 Glu Asn Arg Val Gly Lys Gly Gln Cys Pro Ser Glu Ser Ser Cys Arg
 275 280 285
 Gln Lys Ala Gly Glu Val Arg Ser Phe Val Tyr Leu Lys Gly Asn Lys
 290 295 300
 Leu Leu
 305

<210> 4151

<211> 124

<212> PRT

<213> Homo sapiens

<400> 4151

```

Met Ala Pro Thr Ser Thr Trp Ala Pro Gly Leu Gly Thr Gly Phe Ser
  1             5             10             15
Leu Gly Ser Ser Ser Ser Leu Leu Pro Thr Thr Asp Pro His Gln Val
             20             25             30
Leu Ser Arg Ser Gly Pro Asn Gly Ser Leu Glu Phe Gly Pro Leu Val
             35             40             45
Ser Ser Pro Ala Ser Pro Phe Leu Val Gln Ala Gln Ile Ser Leu Thr
             50             55             60
Lys Ile Val Gln Leu Pro Ser Arg Asn Gly Glu Phe Ile Pro Leu Ile
             65             70             75             80
Leu Pro Pro Ser Phe Arg Leu Pro Thr Leu Phe Cys Ser Gln Ser Asp
             85             90             95
Leu Lys Val Phe Leu Trp Leu His Ser Cys Ala Leu Lys Leu Ser Val
             100            105            110
Ala Pro Gln Gly Pro Gln Arg Arg Gly Arg Gly Gly
             115            120

```

<210> 4152

<211> 131

<212> PRT

<213> Homo sapiens

<400> 4152

```

Met Lys Ala Thr Asn Phe Leu Leu His Ser Cys Leu Ala Ala Ile Tyr
  1             5             10             15
Leu Gly Gln Pro Ile Ser Leu Ala Pro Gln Arg His Thr Arg Leu Gln
             20             25             30
Tyr Pro Lys Arg Pro Tyr Gln Phe Leu Ser Glu Ala Arg Gln Ile Val
             35             40             45

```

Lys Asn Gln Ile Cys Ser Lys Val Leu Gly Pro Pro Leu Ser Ser Asp
 50 55 60
 Arg Cys Arg Gln Val Phe Ser Leu Ala Gln Val Pro Val Ala Ser Leu
 65 70 75 80
 Pro Leu Glu Val Trp Pro Ala Ser Leu Ala Val Asn Pro Val Arg Gly
 85 90 95
 Pro His Leu Ser Leu Ser Ala Ala Ile Ser Phe Cys Thr Ala Ala Ile
 100 105 110
 Leu Leu Pro Ala Ser Ser Pro Pro Pro Ser Tyr Phe Leu Phe Ser Leu
 115 120 125
 Leu Pro Phe
 130

<210> 4153

<211> 151

<212> PRT

<213> Homo sapiens

<400> 4153

Met Thr Lys Glu Tyr Gln Asp Leu Gln His Leu Asp Asn Glu Glu Ser
 1 5 10 15
 Asp His His Gln Leu Arg Lys Gly Glu Gly His Leu Ala Leu Pro Leu
 20 25 30
 Gln Gly Glu Asn Leu Ala Val Leu His Pro Pro Ala Thr Ala Pro Thr
 35 40 45
 Leu Ala Arg Glu Pro Gly Ser Leu Ser Gly Ser Val Ser Leu Pro Gln
 50 55 60
 His Trp Glu Arg Cys Arg Asn Cys Leu Ser Gln Glu Arg Gly Gly Val
 65 70 75 80
 Trp Gly Trp Ile Pro Phe Ile Gly Asp Arg Cys Pro Lys Leu Ser Cys
 85 90 95
 Ala Ser Trp Pro Ser Glu Val Asp Pro Gly Val Trp Glu Gln Leu Glu
 100 105 110
 Ala Gly Glu Met Arg Ser Leu Ser Ala Ser Tyr Asp Glu Val Thr Pro
 115 120 125

Pro Leu Pro Phe Pro Phe Gln His His Pro Gly Thr Pro Val Val Arg
 130 135 140
 Ala Cys Ala Cys Val Cys Gln
 145 150

<210> 4154

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4154

Met Gly Gly Val Pro Glu Pro Phe Pro Ser Pro Leu Arg Arg Gln Gln
 1 5 10 15
 Arg Arg Val Gly Lys Trp Ser Gly Ser Ser Leu Gly Gly Leu Ala Gln
 20 25 30
 Val Leu Arg Asn Cys Asn Arg Lys Cys Arg Ser Trp Ser Glu Pro Met
 35 40 45
 Arg Arg Lys Pro His Leu Cys Ile Ala His Ala Ser Trp Arg Gly Asp
 50 55 60
 Ile Ile His Ser His Ala Ser His Leu Ser Pro Gln Gly Pro Arg Glu
 65 70 75 80
 Lys Pro Gln Thr Pro Phe Ser Cys Arg Val Trp Gly Trp Trp Cys Cys
 85 90 95
 Arg Gly Arg Ala Gly Trp Gly Ser Pro Asp Phe Phe Cys Pro
 100 105 110

<210> 4155

<211> 589

<212> PRT

<213> Homo sapiens

<400> 4155

Met Ala Ala Glu Lys Gln Val Pro Gly Gly Gly Gly Gly Gly Gly Ser
 1 5 10 15

Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Arg Gly
 20 25 30
 Ala Gly Gly Glu Glu Asn Lys Glu Asn Glu Arg Pro Ser Ala Gly Ser
 35 40 45
 Lys Ala Asn Lys Glu Phe Gly Asp Ser Leu Ser Leu Glu Ile Leu Gln
 50 55 60
 Ile Ile Lys Glu Ser Gln Gln Gln His Gly Leu Arg His Gly Asp Phe
 65 70 75 80
 Gln Arg Tyr Arg Tyr Leu Leu Leu Val Leu Met Asp Ala Glu Arg Ala
 85 90 95
 Trp Ser Tyr Ala Met Gln Leu Lys Gln Glu Ala Asn Thr Glu Pro Arg
 100 105 110
 Lys Arg Phe His Leu Leu Ser Arg Leu Arg Lys Ala Val Lys His Ala
 115 120 125
 Glu Glu Leu Glu Arg Leu Cys Glu Ser Asn Arg Val Asp Ala Lys Thr
 130 135 140
 Lys Leu Glu Ala Gln Ala Tyr Thr Ala Tyr Leu Ser Gly Met Leu Arg
 145 150 155 160
 Phe Glu His Gln Glu Trp Lys Ala Ala Ile Glu Ala Phe Asn Lys Cys
 165 170 175
 Lys Thr Ile Tyr Glu Lys Leu Ala Ser Ala Phe Thr Glu Glu Gln Ala
 180 185 190
 Val Leu Tyr Asn Gln Arg Val Glu Glu Ile Ser Pro Asn Ile Arg Tyr
 195 200 205
 Cys Ala Tyr Asn Ile Gly Asp Gln Ser Ala Ile Asn Glu Leu Met Gln
 210 215 220
 Met Arg Leu Arg Ser Gly Gly Thr Glu Gly Leu Leu Ala Glu Lys Leu
 225 230 235 240
 Glu Ala Leu Ile Thr Gln Thr Arg Ala Lys Gln Ala Ala Thr Met Ser
 245 250 255
 Glu Val Glu Trp Arg Gly Arg Thr Val Pro Val Lys Ile Asp Lys Val
 260 265 270
 Arg Ile Phe Leu Leu Gly Leu Ala Asp Asn Glu Ala Ala Ile Val Gln
 275 280 285
 Ala Glu Ser Glu Glu Thr Lys Glu Arg Leu Phe Glu Ser Met Leu Ser
 290 295 300

Glu Cys Arg Asp Ala Ile Gln Val Val Arg Glu Glu Leu Lys Pro Asp
 305 310 315 320
 Gln Lys Gln Arg Asp Tyr Ile Leu Glu Gly Glu Pro Gly Lys Val Ser
 325 330 335
 Asn Leu Gln Tyr Leu His Ser Tyr Leu Thr Tyr Ile Lys Leu Ser Thr
 340 345 350
 Ala Ile Lys Arg Asn Glu Asn Met Ala Lys Gly Leu Gln Arg Ala Leu
 355 360 365
 Leu Gln Gln Gln Pro Glu Asp Asp Ser Lys Arg Ser Pro Arg Pro Gln
 370 375 380
 Asp Leu Ile Arg Leu Tyr Asp Ile Ile Leu Gln Asn Leu Val Glu Leu
 385 390 395 400
 Leu Gln Leu Pro Gly Leu Glu Glu Asp Lys Ala Phe Gln Lys Glu Ile
 405 410 415
 Gly Leu Lys Thr Leu Val Phe Lys Ala Tyr Arg Cys Phe Phe Ile Ala
 420 425 430
 Gln Ser Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr
 435 440 445
 Asp Arg Val Leu Lys Tyr Ala Asn Glu Val Asn Ser Asp Ala Gly Ala
 450 455 460
 Phe Lys Asn Ser Leu Lys Asp Leu Pro Asp Val Gln Glu Leu Ile Thr
 465 470 475 480
 Gln Val Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ala Ile Leu Asp
 485 490 495
 Ala Asn Asp Ala His Gln Thr Glu Thr Ser Ser Ser Gln Val Lys Asp
 500 505 510
 Asn Lys Pro Leu Val Glu Arg Phe Glu Thr Phe Cys Leu Asp Pro Ser
 515 520 525
 Leu Val Thr Lys Gln Ala Asn Leu Val His Phe Pro Pro Gly Phe Gln
 530 535 540
 Pro Ile Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val
 545 550 555 560
 Ala Phe Pro Pro Leu Glu Asp Glu Leu Glu Gln Lys Thr Lys Ser Gly
 565 570 575
 Leu Thr Gly Tyr Ile Lys Gly Ile Phe Gly Phe Arg Ser
 580 585

<210> 4156

<211> 356

<212> PRT

<213> Homo sapiens

<400> 4156

```

Met Phe Ser Ser Tyr Pro Leu Pro Asn Cys Tyr Leu Ser Asp Ile Thr
  1             5             10             15
Arg Asn Ala Gly Ile Lys Gln Asp Asn Asp Leu Asp Lys Leu Leu Leu
      20             25             30
Cys Leu Lys Ile Ser Asp Lys Gln Thr Glu Trp Ile Glu Asn Cys Gln
      35             40             45
Arg Gln Phe Cys Lys Met Met Lys Ala Lys Pro Asp Ile Ile Ser Gly
      50             55             60
Glu Ala Leu Ile Glu Leu Leu Glu Lys Phe Val Leu His Leu Thr Glu
      65             70             75             80
Ser Pro Ser Glu Cys Tyr Phe Pro Ser Val Glu Tyr Thr Ala Thr Asp
      85             90             95
Ala Asn Val Lys Asn Glu Ser Leu Ser Ser Val Gln Gln Leu Gly Ile
      100            105            110
Lys Met Thr Val Arg Tyr Gly Lys Phe Leu Ser Leu Leu Lys Asp Gly
      115            120            125
Ala Glu Asn Asp Leu Thr Trp Val Leu Lys His Cys Glu Arg Phe Leu
      130            135            140
Lys Gln Gln Gln Thr Ser Ile Lys Ser Ser Leu Leu Cys Leu Gln Gly
      145            150            155            160
Asn Tyr Ala Gly His Asp Trp Phe Val Ser Ser Leu Phe Met Ile Met
      165            170            175
Leu Gly Asp Lys Glu Lys Thr Phe Gln Phe Leu His Gln Phe Ser Arg
      180            185            190
Leu Leu Thr Ser Ala Phe Leu Trp Ser Pro Arg Leu His Ile Ser Ser
      195            200            205
Tyr Leu Pro Asn Asp Thr Val Glu Ser Gly Ile His Pro Val Tyr Phe
      210            215            220

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Cys Ser Thr His Tyr Ile Glu Met Leu Leu Lys Ala Glu Leu Pro Leu
 225 230 235 240
 Val Phe Ser Ala Phe His Met Ser Gly Phe Ala Pro Ser Gln Ile Cys
 245 250 255
 Leu Gln Trp Ile Thr Gln Cys Phe Trp Asn Tyr Leu Asp Trp Ile Glu
 260 265 270
 Ile Cys His Tyr Ile Ala Thr Cys Val Phe Leu Gly Pro Asp Tyr Gln
 275 280 285
 Val Tyr Ile Cys Ile Ala Val Phe Lys His Leu Gln Gln Asp Ile Leu
 290 295 300
 Gln His Thr Gln Thr Gln Asp Leu Gln Val Phe Leu Lys Glu Glu Ala
 305 310 315 320
 Leu His Gly Phe Arg Val Ser Asp Tyr Phe Glu Tyr Met Glu Ile Leu
 325 330 335
 Glu Gln Asn Tyr Arg Thr Val Leu Leu Arg Asp Met Arg Asn Ile Arg
 340 345 350
 Leu Gln Ser Thr
 355

<210> 4157

<211> 137

<212> PRT

<213> Homo sapiens

<400> 4157

Met Ser Asn Cys Phe Leu Lys Val Cys Pro Ala Val Ser Ser Tyr Ser
 1 5 10 15
 Pro Leu Ser Val Gln Val Leu Phe Tyr Phe Pro Ile Ala Pro Cys Pro
 20 25 30
 His Arg Val Gly Val Gly Glu Val Gln Cys Ala Cys Val His Ile His
 35 40 45
 Ile Phe Arg Cys Tyr Gln Leu Gly Ser Gln Leu Ile Cys Ala Ser Phe
 50 55 60
 Leu Gly Thr Val Leu His Pro Phe Pro Pro Val Gly Ser Ala Phe Glu
 65 70 75 80

Ile Gln Thr Ser Ile Leu Asn Tyr Thr Ile Leu Thr Asn Ser Leu Thr
 85 90 95
 Pro Met Arg Leu Tyr Leu Pro His Val Arg Val Ser Gly Ser Leu Cys
 100 105 110
 Glu Phe Val Tyr Arg Tyr Leu Lys Ser Asn Gln Leu Ser His Tyr Ser
 115 120 125
 His Gln Ser Ser Pro Arg His His Phe
 130 135

<210> 4158

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4158

Met Asn His Leu Pro Pro Asn His Tyr Arg Ser His Val Phe Thr Cys
 1 5 10 15
 His Val Asp Gln Tyr Leu Thr Val Glu Thr Ala Gly Gly Met Glu Lys
 20 25 30
 Glu Ala Val Ser Val Thr Val Leu Leu Ser Ala Ala Pro Cys Leu Leu
 35 40 45
 Ser Cys Phe Leu Gly Ser Ser Val Ser Gly Leu Ala Phe Trp Val Ser
 50 55 60
 Gln Gln Lys Thr Lys Gly Pro Glu Arg Cys Lys Asn Thr His His Leu
 65 70 75 80
 Ala Gly Asn Asn Phe Pro Ala Cys Tyr Leu Phe Arg Asp Pro Glu His
 85 90 95
 Thr Ala Phe Pro Arg Arg Leu Leu Pro Pro Ala Thr Glu Glu
 100 105 110

<210> 4159

<211> 192

<212> PRT

<213> Homo sapiens

<400> 4159

Met Ala Cys Gly Ala Thr Leu Lys Arg Pro Met Glu Phe Glu Ala Ala
 1 5 10 15
 Leu Leu Ser Pro Gly Ser Pro Lys Arg Arg Arg Cys Ala Pro Leu Pro
 20 25 30
 Gly Pro Thr Pro Gly Leu Arg Pro Pro Asp Ala Glu Pro Pro Pro Pro
 35 40 45
 Phe Gln Thr Gln Thr Pro Pro Gln Ser Leu Gln Gln Pro Ala Pro Pro
 50 55 60
 Gly Ser Glu Arg Arg Leu Pro Thr Pro Glu Gln Ile Phe Gln Asn Ile
 65 70 75 80
 Lys Gln Glu Tyr Ser Arg Tyr Gln Arg Trp Arg His Leu Glu Val Val
 85 90 95
 Leu Asn Gln Ser Glu Ala Cys Ala Ser Glu Ser Gln Pro His Ser Ser
 100 105 110
 Ala Leu Thr Ala Pro Ser Ser Pro Gly Ser Ser Trp Met Lys Lys Asp
 115 120 125
 Gln Pro Thr Phe Thr Leu Arg Gln Val Gly Ile Ile Cys Glu Arg Leu
 130 135 140
 Leu Lys Asp Tyr Glu Asp Lys Ile Arg Glu Glu Tyr Glu Gln Ile Leu
 145 150 155 160
 Asn Thr Lys Leu Ala Glu Gln Tyr Glu Ser Phe Val Lys Phe Thr His
 165 170 175
 Asp Gln Ile Met Arg Arg Tyr Gly Thr Arg Pro Thr Ser Tyr Val Ser
 180 185 190

<210> 4160

<211> 352

<212> PRT

<213> Homo sapiens

<400> 4160

Met Thr Ala Met Glu Met Ser Thr Glu Leu Ser Met Phe Phe Trp Lys
 1 5 10 15

Glu Thr Gln Thr Arg Ile Pro Gly Arg Trp Ser Gly Arg Arg Arg Glu
 20 25 30
 Ser Gln Ala Arg Arg Met Val Ala Arg Arg Gly Arg Gly Ala Ser Arg
 35 40 45
 Gly Arg Glu Phe Arg Gly Gln Glu Asn Gly Leu Asp Gly Thr Lys Ser
 50 55 60
 Gly Gly Pro Ser Gly Arg Gly Thr Glu Arg Gly Arg Arg Gly Arg Gly
 65 70 75 80
 Arg Gly Arg Gly Gly Ser Gly Arg Arg Gly Gly Arg Phe Ser Ala Gln
 85 90 95
 Gly Met Gly Thr Phe Asn Pro Ala Asp Tyr Ala Glu Pro Ala Asn Thr
 100 105 110
 Asp Asp Asn Tyr Gly Asn Ser Ser Val Ser Ser Ser Leu Asn Ser Gly
 115 120 125
 Ser Ser Leu Gly Leu Ser Leu Gly Ser Asn Ser Thr Val Thr Ala Ser
 130 135 140
 Thr Arg Ser Ser Val Ala Thr Thr Ser Gly Lys Ala Pro Pro Asn Leu
 145 150 155 160
 Pro Pro Gly Val Pro Pro Leu Leu Pro Asn Pro Tyr Ile Met Ala Pro
 165 170 175
 Gly Leu Leu His Ala Tyr Pro Pro Gln Val Tyr Gly Tyr Asp Asp Leu
 180 185 190
 Gln Met Leu Gln Thr Arg Phe Pro Leu Asp Tyr Tyr Ser Ile Pro Phe
 195 200 205
 Pro Thr Pro Thr Thr Pro Leu Thr Gly Arg Asp Gly Ser Leu Ala Ser
 210 215 220
 Asn Pro Tyr Ser Gly Asp Leu Thr Lys Phe Gly Arg Gly Asp Ala Ser
 225 230 235 240
 Ser Pro Ala Pro Ala Thr Thr Leu Ala Gln Pro Gln Gln Asn Gln Thr
 245 250 255
 Gln Thr His His Thr Thr Gln Gln Thr Phe Leu Asn Pro Ala Leu Pro
 260 265 270
 Pro Gly Tyr Ser Tyr Thr Ser Leu Pro Tyr Tyr Thr Gly Val Pro Gly
 275 280 285
 Leu Pro Ser Thr Phe Gln Tyr Gly Pro Ala Val Phe Pro Val Ala Pro
 290 295 300

Thr Ser Ser Lys Gln His Gly Val Asn Val Ser Val Asn Ala Ser Ala
 305 310 315 320
 Thr Pro Phe Gln Gln Pro Ser Gly Tyr Gly Ser His Gly Tyr Asn Thr
 325 330 335
 Gly Arg Lys Tyr Pro Pro Pro Tyr Lys His Phe Trp Thr Ala Glu Ser
 340 345 350

<210> 4161

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4161

Met Glu Ala Leu Leu Ser Val Gln Glu Ala Ser Arg Cys Pro Pro Gly
 1 5 10 15
 Phe Phe Pro Ser Ser Gly Trp Pro Arg Ser Gln Ala Trp Ser Thr Arg
 20 25 30
 Ser Gln Pro Val Gln Arg Pro Val Ala Cys Leu Pro Gly Pro Leu Pro
 35 40 45
 Gly Leu Ala Leu Pro Gly Asp Leu Ser Ile Ile Pro Glu Lys Trp Met
 50 55 60
 Glu Arg Val Met Ala Pro Leu Lys Arg Gln Thr Ser Arg Arg Leu Glu
 65 70 75 80
 Glu Ser Lys Gly Ser Cys Pro Gln Arg Pro Val Pro Ala Pro Thr Gln
 85 90 95
 Pro Leu Val Cys Pro Pro Ser Leu Leu Ser Ser Thr Leu Leu Cys Cys
 100 105 110
 Pro Leu Leu Leu Thr Arg
 115

<210> 4162

<211> 279

<212> PRT

<213> Homo sapiens

<400> 4162

Met Met Leu Met Gln Ala Leu Val Leu Phe Thr Leu Asp Ser Leu Asp
 1 5 10 15
 Met Leu Pro Ala Val Lys Ala Thr Trp Leu Tyr Gly Ile Gln Ile Thr
 20 25 30
 Ser Leu Leu Leu Val Cys Ile Leu Gln Phe Phe Asn Ser Met Ile Leu
 35 40 45
 Gly Ser Leu Leu Ile Ser Phe Asn Leu Ser Val Phe Ile Ala Arg Lys
 50 55 60
 Leu Gln Lys Asn Leu Lys Thr Gly Ser Phe Leu Asn Arg Leu Gly Lys
 65 70 75 80
 Leu Leu Leu His Leu Phe Met Val Leu Cys Leu Thr Leu Phe Leu Asn
 85 90 95
 Asn Ile Ile Lys Lys Ile Leu Asn Leu Lys Ser Asp Glu His Ile Phe
 100 105 110
 Lys Phe Leu Lys Ala Lys Phe Gly Leu Gly Ala Thr Arg Asp Phe Asp
 115 120 125
 Ala Asn Leu Tyr Leu Cys Glu Glu Ala Phe Gly Leu Leu Pro Phe Asn
 130 135 140
 Thr Phe Gly Arg Leu Ser Asp Thr Leu Leu Phe Tyr Ala Tyr Ile Phe
 145 150 155 160
 Val Leu Ser Ile Thr Val Ile Val Ala Phe Val Val Ala Phe His Asn
 165 170 175
 Leu Ser Asp Ser Thr Asn Gln Gln Ser Val Gly Lys Met Glu Lys Gly
 180 185 190
 Thr Val Asp Leu Lys Pro Glu Thr Ala Tyr Asn Leu Ile His Thr Ile
 195 200 205
 Leu Phe Gly Phe Leu Ala Leu Ser Thr Met Arg Met Lys Tyr Leu Trp
 210 215 220
 Thr Ser His Met Cys Val Phe Ala Ser Phe Gly Leu Cys Ser Pro Glu
 225 230 235 240
 Ile Trp Glu Leu Leu Leu Lys Ser Val His Leu Tyr Asn Pro Lys Arg
 245 250 255
 Ile Cys Ile Met Arg Tyr Ser Val Pro Ile Leu Ile Leu Leu Tyr Leu

260 265 270
 Cys Tyr Lys Asn Gln Lys Ser
 275

<210> 4163

<211> 221

<212> PRT

<213> Homo sapiens

<400> 4163

Met Ala Ser Ser Thr Ser Leu Pro Ala Pro Gly Ser Arg Pro Lys Lys
 1 5 10 15
 Pro Leu Gly Lys Met Ala Asp Trp Phe Arg Gln Thr Leu Leu Lys Lys
 20 25 30
 Pro Lys Lys Arg Pro Asn Ser Pro Glu Ser Thr Ser Ser Asp Ala Ser
 35 40 45
 Gln Pro Thr Ser Gln Asp Asn Pro Leu Pro Pro Ser Leu Ser Ser Val
 50 55 60
 Thr Ser Pro Ser Leu Pro Pro Thr His Ala Ser Asp Ser Gly Ser Ser
 65 70 75 80
 Arg Trp Ser Lys Asp Tyr Asp Val Cys Val Cys His Ser Glu Glu Asp
 85 90 95
 Leu Val Ala Ala Gln Asp Leu Val Ser Tyr Leu Glu Gly Ser Thr Ala
 100 105 110
 Ser Leu Arg Cys Phe Leu Gln Leu Arg Asp Ala Thr Pro Gly Gly Ala
 115 120 125
 Ile Val Ser Glu Leu Cys Gln Ala Leu Ser Ser Ser His Cys Arg Val
 130 135 140
 Leu Leu Ile Thr Pro Gly Phe Leu Gln Asp Pro Trp Cys Lys Tyr Gln
 145 150 155 160
 Met Leu Gln Ala Leu Thr Glu Ala Pro Gly Ala Glu Gly Cys Thr Ile
 165 170 175
 Pro Leu Leu Ser Gly Leu Ser Arg Ala Ala Tyr Pro Pro Glu Leu Arg
 180 185 190
 Phe Met Tyr Tyr Val Asp Gly Arg Gly Pro Asp Gly Gly Phe Arg Gln

195	200	205
Val Lys Glu Ala Val Met Arg Tyr Leu Gln Thr Leu Ser		
210	215	220

<210> 4164

<211> 458

<212> PRT

<213> Homo sapiens

<400> 4164

Met Glu Glu Glu Lys Asp Asp Ser Pro Gln Ala Asp Phe Cys Leu Gly			
1	5	10	15
Thr Ala Leu His Ser Trp Gly Leu Trp Phe Thr Glu Glu Gly Ser Pro			
20	25	30	
Ser Thr Met Leu Thr Gly Ile Ala Val Gly Ala Leu Leu Ala Leu Ala			
35	40	45	
Leu Val Gly Val Leu Ile Leu Phe Met Phe Arg Arg Leu Arg Gln Phe			
50	55	60	
Arg Gln Ala Gln Pro Thr Pro Gln Tyr Arg Phe Arg Lys Arg Asp Lys			
65	70	75	80
Val Met Phe Tyr Gly Arg Lys Ile Met Arg Lys Val Thr Thr Leu Pro			
85	90	95	
Asn Thr Leu Val Glu Asn Thr Ala Leu Pro Arg Gln Arg Ala Arg Lys			
100	105	110	
Arg Thr Lys Val Leu Ser Leu Ala Lys Arg Ile Leu Arg Phe Lys Lys			
115	120	125	
Glu Tyr Pro Ala Leu Gln Pro Lys Glu Pro Pro Pro Ser Leu Leu Glu			
130	135	140	
Ala Asp Leu Thr Glu Phe Asp Val Lys Asn Ser His Leu Pro Ser Glu			
145	150	155	160
Val Leu Tyr Met Leu Lys Asn Val Arg Val Leu Gly His Phe Glu Lys			
165	170	175	
Pro Leu Phe Leu Glu Leu Cys Lys His Ile Val Phe Val Gln Leu Gln			
180	185	190	
Glu Gly Glu His Val Leu Gln Pro Arg Glu Pro Asp Pro Ser Ile Cys			

195	200	205
Val Val Gln Asp Gly Arg Leu Glu Val Cys Ile Gln Asp Thr Asp Gly		
210	215	220
Thr Glu Val Val Val Lys Glu Val Leu Ala Gly Asp Ser Val His Ser		
225	230	235
Leu Leu Ser Ile Leu Asp Ile Ile Thr Gly His Ala Ala Pro Tyr Lys		
245	250	255
Thr Val Ser Val Arg Ala Ala Ile Pro Ser Thr Ile Leu Arg Leu Pro		
260	265	270
Ala Ala Ala Phe His Gly Val Phe Glu Lys Tyr Pro Glu Thr Leu Val		
275	280	285
Arg Val Val Gln Ile Ile Met Val Arg Leu Gln Arg Val Thr Phe Leu		
290	295	300
Ala Leu His Asn Tyr Leu Gly Leu Thr Thr Glu Leu Phe Asn Ala Glu		
305	310	315
Ser Gln Ala Ile Pro Leu Val Ser Val Ala Ser Val Ala Ala Gly Lys		
325	330	335
Ala Lys Lys Gln Val Phe Tyr Gly Glu Glu Glu Arg Leu Lys Lys Pro		
340	345	350
Pro Arg Leu Gln Glu Ser Cys Asp Ser Asp His Gly Gly Gly Arg Pro		
355	360	365
Ala Ala Ala Gly Pro Leu Leu Lys Arg Ser His Ser Val Pro Ala Pro		
370	375	380
Ser Ile Arg Lys Gln Ile Leu Glu Glu Leu Glu Lys Pro Gly Ala Gly		
385	390	395
Asp Pro Asp Pro Ser Ala Pro Gln Ala Arg Val Leu Cys Leu Leu Pro		
405	410	415
Gln Cys Leu Gly Gly Leu Pro Pro Thr Asp Thr Ser Val Tyr Ser Ser		
420	425	430
Ala Ser Ser Asp Cys Cys Gly Cys Ser Met Pro Val Leu Cys Ile Met		
435	440	445
Gly His Lys Pro His Val Thr Val Asp Thr		
450	455	

<210> 4165

<211> 164

<212> PRT

<213> Homo sapiens

<400> 4165

Met Cys His His Ala Arg Leu Ile Val Phe Val Phe Leu Val Glu Thr
 1 5 10 15
 Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly
 20 25 30
 Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser
 35 40 45
 His Cys Ala Gln Pro Thr Ile Ser Tyr Phe His Val Phe Leu Cys Val
 50 55 60
 Leu Phe Tyr Phe Ser Arg Trp Ser Leu Ser Val Ala Gln Ala Gly Val
 65 70 75 80
 Gln Trp Arg Asp Leu Gly Ser Leu Pro Gly Phe Lys Arg Phe Ser Cys
 85 90 95
 Leu Ser Leu Pro Ser Asn Trp Asp Cys Arg His Pro Pro Ser Cys Pro
 100 105 110
 Ala Lys Phe Cys Thr Phe Val Glu Met Glu Phe His His Val Gly Gln
 115 120 125
 Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Pro Thr Leu Ala Ser
 130 135 140
 Gln Ser Ala Gly Ile Thr Gly Val Ser His His Ala Trp Thr Arg Cys
 145 150 155 160
 Cys Cys Cys Phe

<210> 4166

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4166

Met Pro Thr Met Ser Ser Lys Val Leu Asp Ser Leu Val Val Ala Leu

1	5	10	15
Leu Ser Tyr Trp	Leu Asp Asn Pro Lys	His Cys Arg Lys	Leu His Ser
20	25	30	
Ala Pro Leu Gly	Leu Pro Gly Ser Ile	Arg Leu Leu Pro	Leu Leu Ser
35	40	45	
Leu Gly Thr His	Leu Ser Lys Ser Ser	Ile Leu Lys Arg	Lys Phe Leu
50	55	60	
Phe Trp Arg Ser	Phe Val Asn Lys Thr	Ser Ile Gly Trp	Ala Glu Trp
65	70	75	80
Leu Ile Thr Val	Ile Ser Ala Leu Arg	Asp Ala Lys Val	Gly Arg Ser
85	90	95	
Pro Glu Val Arg	Ser Leu Arg Pro Ala	Trp Pro Thr Trp	Trp Ser Pro
100	105	110	
Val Ser Thr Lys	Asn Thr Lys Lys	Leu Gly Arg Tyr	Gly Gly Ala Arg
115	120	125	
Leu Trp Ser Gln	Leu Phe Gly Arg	Leu Arg Gln Asp	Asn His Leu Asn
130	135	140	
Arg Gly Asp Arg	Gly Cys Ser Glu	Pro Arg Leu Cys	His Cys Pro Pro
145	150	155	160
Ala Trp Ala Thr	Lys		
165			

<210> 4167

<211> 148

<212> PRT

<213> Homo sapiens

<400> 4167

Met Pro Pro Arg	Leu Ala Asn Ile	Leu Tyr Phe Ser	Arg Asp Gly Gly
1	5	10	15
Phe Cys Arg Val	Gly Leu Ala Gly	Leu Lys Leu Leu	Ser Ser Gly Asp
20	25	30	
Pro Pro Ala Ser	Val Ser Arg Gly	Ala Gly Ile Thr	Gly Val Ser His
35	40	45	
Arg Ala Arg Pro	Leu Asn Thr Cys	Gly Pro Val Ile	His Pro Ala Leu

50 55 60
 Lys Arg Ser Ser His Leu Pro Phe Trp Glu Leu Gly Glu Thr Ala Gln
 65 70 75 80
 Ile Val Thr Ala Pro Pro Pro Pro Arg Ala Pro Leu Thr Gly Leu Trp
 85 90 95
 Val Glu Pro Ala Pro Val Pro Ala Pro Ser Thr Glu Ala Gly Thr Val
 100 105 110
 His Thr Ala Ser Thr Ala Arg Pro Gly Glu Trp Ala Ala Val His Leu
 115 120 125
 Gly Cys Pro Ala Gln Ser Gln Ala Ser Ala Glu Pro Ile Leu Pro His
 130 135 140
 Cys Thr Gln His
 145

<210> 4168

<211> 153

<212> PRT

<213> Homo sapiens

<400> 4168

Met Phe Ile Phe Gly Ser Arg Arg Thr Arg Ala Gly Val Leu Arg Val
 1 5 10 15
 His Phe Arg Leu Lys Ala Tyr Thr Cys Arg Cys Ala Thr Cys Leu Phe
 20 25 30
 Ser Val Gln Gly Val His Val Gln Val Cys Tyr Val Phe Ile Phe Gly
 35 40 45
 Ser Arg Arg Thr Arg Ala Gly Val Leu Arg Val His Phe Arg Phe Lys
 50 55 60
 Ala Tyr Thr Cys Arg Cys Val Thr Cys Ser Phe Ser Ala Gln Gly Val
 65 70 75 80
 His Val Gln Val Cys His Met Gly Lys Ser Ser Val Thr Gly Val Trp
 85 90 95
 Cys Ala Asp Asn Phe Val Ala Gln Val Ile Ser Thr Val Pro Asp Val
 100 105 110
 Phe Gln Ser Ser Pro Ser Ser His Ser Pro Pro Ser Thr Phe Ser Phe

115	120	125
Lys Lys Lys Phe Ser Ser Gln His Phe Gly Arg Leu Arg Arg Ala Asp		
130	135	140
His Glu Val Arg Ser Ser Arg Ser Pro		
145	150	

<210> 4169

<211> 369

<212> PRT

<213> Homo sapiens

<400> 4169

Met Tyr Ser Pro Ile Ile Tyr Gln Ala Leu Cys Glu His Val Gln Thr		
1	5	10
Gln Met Ser Leu Met Asn Asp Leu Thr Ser Lys Asn Ile Pro Asn Gly		
20	25	30
Ile Pro Ala Val Pro Cys His Ala Pro Ser His Ser Glu Ser Gln Ala		
35	40	45
Thr Pro His Ser Ser Tyr Gly Leu Cys Thr Ser Thr Pro Val Trp Ser		
50	55	60
Leu Gln Arg Pro Pro Cys Pro Pro Lys Val His Ser Glu Val Gln Thr		
65	70	75
Asp Gly Asn Ser Gln Phe Ala Ser Gln Gly Lys Thr Val Ser Ala Thr		
85	90	95
Cys Thr Asp Val Leu Arg Asn Ser Phe Asn Thr Ser Pro Gly Val Pro		
100	105	110
Cys Ser Leu Pro Lys Thr Asp Ile Ser Ala Ile Pro Thr Leu Gln Gln		
115	120	125
Leu Gly Leu Val Asn Gly Ile Leu Pro Gln Gln Gly Ile His Lys Glu		
130	135	140
Thr Asp Leu Leu Lys Cys Ile Gln Thr Tyr Leu Ser Leu Phe Arg Ser		
145	150	155
His Gly Lys Glu Pro His Leu Asp Ser Gln Thr His Arg Ser Pro Thr		

165

170

175

Gln Ser Gln Pro Ala Phe Leu Ala Thr Asn Glu Glu Ile Cys Ala Arg
 180 185 190
 Glu Gln Ile Arg Glu Ala Thr Ser Glu Arg Lys Asp Leu Asn Ile His
 195 200 205
 Val Arg Asp Thr Lys Thr Val Lys Asp Val Gln Lys Ala Lys Asn Val
 210 215 220
 Asn Lys Thr Ala Glu Lys Val Arg Ile Ile Lys Tyr Leu Leu Gly Glu
 225 230 235 240
 Leu Lys Ala Leu Val Ala Glu Gln Glu Asp Ser Glu Ile Gln Arg Leu
 245 250 255
 Ile Thr Glu Met Glu Ala Cys Ile Ser Val Leu Pro Thr Val Ser Gly
 260 265 270
 Asn Thr Asp Ile Gln Val Glu Ile Ala Leu Ala Met Gln Pro Leu Arg
 275 280 285
 Ser Glu Asn Ala Gln Leu Arg Arg Gln Leu Arg Ile Leu Asn Gln Gln
 290 295 300
 Leu Arg Glu Gln Gln Lys Thr Gln Lys Pro Ser Gly Ala Val Asp Cys
 305 310 315 320
 Asn Leu Glu Leu Phe Ser Leu Gln Ser Leu Asn Met Ser Leu Gln Asn
 325 330 335
 Gln Leu Glu Glu Ser Leu Lys Ser Gln Glu Leu Leu Gln Ser Lys Asn
 340 345 350
 Glu Glu Leu Leu Lys Val Ile Glu Asn Gln Lys Asp Glu Asn Lys Lys
 355 360 365
 Ile

<210> 4170

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4170

Met Pro Gln Ser Arg Arg Gln Trp Asp Phe Glu Gly Gly Lys Gly Arg
 1 5 10 15

Arg	Gln	Ala	Gly	His	Ala	Leu	Arg	Gly	Ala	Arg	Thr	His	Leu	Leu	His
20				25				30							
Pro	His	Val	Phe	Arg	Ala	Leu	Ser	Leu	Trp	Glu	Ala	Phe	Phe	Arg	Thr
35				40				45							
Ala	Leu	Val	Asn	Trp	Lys	Arg	Asn	Pro	Ser	Pro	Trp	Trp	Pro	Cys	Ser
50				55				60							
Asp	Leu	Asp	Leu	Ser	Glu	Val	Thr	Leu	Pro	Leu	Arg	Ala	Leu	Gln	Ser
65				70				75				80			
Leu	Leu	Ala	Gly	Gly	Gly	Thr	Ser	Pro	Ser	His	Ser	His	Phe	Leu	Thr
85				90				95							
Leu	Ser	Leu	Cys	Ile	Thr	Gly	Ser	Leu	Leu						
100				105											

<210> 4171

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4171

Met	Asn	Glu	Pro	Leu	Asp	Tyr	Leu	Ala	Asn	Ala	Ser	Asp	Phe	Pro	Asp
1				5					10					15	
Tyr	Ala	Ala	Ala	Phe	Gly	Asn	Cys	Thr	Asp	Glu	Asn	Ile	Pro	Leu	Lys
				20				25					30		
Met	His	Tyr	Leu	Pro	Val	Ile	Tyr	Gly	Ile	Ile	Phe	Leu	Val	Gly	Phe
				35			40					45			
Pro	Gly	Asn	Ala	Val	Val	Ile	Ser	Thr	Tyr	Ile	Phe	Lys	Met	Arg	Pro
				50			55				60				
Trp	Lys	Ser	Ser	Thr	Ile	Ile	Met	Leu	Asn	Leu	Ala	Cys	Thr	Asp	Leu
65					70					75				80	
Leu	Tyr	Leu	Thr	Ser	Leu	Pro	Phe	Leu	Ile	His	Tyr	Tyr	Ala	Ser	Gly
				85					90					95	
Glu	Asn	Trp	Ile	Phe	Gly	Asp	Phe	Met	Cys	Lys	Phe	Ile	Arg	Phe	Ser
				100				105					110		
Phe	His	Phe	Asn	Leu	Tyr	Ser	Ser	Ile	Leu	Phe	Leu	Thr	Cys	Phe	Ser
				115			120					125			

Ile Phe Arg Tyr Cys Val Ile Ile His Pro Met Ser Cys Phe Ser Ile
 130 135 140
 His Lys Thr Arg Cys Ala Val Val Ala Cys Ala Val Val Trp Ile Ile
 145 150 155 160
 Ser Leu Val Ala Val Ile Pro Met Thr Phe Leu Ile Thr Ser Thr Asn
 165 170 175
 Arg Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr Ser Ser Asp Glu Leu
 180 185 190
 Asn Thr Ile Lys Trp Tyr Asn Leu Ile Leu Thr Ala Thr Thr Phe Cys
 195 200 205
 Leu Pro Leu Val Ile Val Thr Leu Cys Tyr Thr Thr Ile Ile His Thr
 210 215 220
 Leu Thr His Gly Leu Gln Thr Asp Ser Cys Leu Lys Gln Lys Ala Arg
 225 230 235 240
 Arg Leu Thr Ile Leu Leu Leu Leu Ala Phe Tyr Val Cys Phe Leu Pro
 245 250 255
 Phe His Ile Leu Arg Val Ile Arg Ile Glu Ser Arg Leu Leu Ser Ile
 260 265 270
 Ser Cys Ser Ile Glu Asn Gln Ile His Glu Ala Tyr Ile Val Ser Arg
 275 280 285
 Pro Leu Ala Ala Leu Asn Thr Phe Gly Asn Leu Leu Leu Tyr Val Val
 290 295 300
 Val Ser Asp Asn Phe Gln Gln Ala Val Cys Ser Thr Val Arg Cys Lys
 305 310 315 320
 Val Ser Gly Asn Leu Glu Gln Ala Lys Lys Ile Ser Tyr Ser Asn Asn
 325 330 335
 Pro

<210> 4172

<211> 595

<212> PRT

<213> Homo sapiens

<400> 4172

Met Ser Arg His Glu Ile Gln Gly Lys Lys Met Ala Tyr Gln Lys Val
 1 5 10 15
 His Ala Asp Gln Arg Ala Pro Gly His Ser Gln Tyr Leu Asp Asn Asp
 20 25 30
 Asp Leu Gln Ala Thr Ala Leu Asp Leu Glu Trp Asp Met Glu Lys Glu
 35 40 45
 Leu Glu Glu Ser Gly Phe Asp Gln Phe Gln Leu Asp Ser Ala Glu Asn
 50 55 60
 Gln Asn Leu Gly His Ser Glu Thr Ile Asp Leu Asn Leu Asp Ser Ile
 65 70 75 80
 Gln Pro Ala Thr Ser Pro Lys Gly Arg Phe Gln Arg Leu Gln Glu Glu
 85 90 95
 Ser Asp Tyr Ile Thr His Tyr Thr Arg Ser Ala Pro Lys Ser Asn Arg
 100 105 110
 Cys Asn Phe Cys His Val Leu Lys Met Leu Cys Thr Ala Thr Ile Leu
 115 120 125
 Phe Ile Phe Gly Ile Leu Ile Gly Tyr Tyr Val His Thr Asn Cys Pro
 130 135 140
 Ser Asp Ala Pro Ser Ser Gly Thr Val Asp Pro Gln Leu Tyr Gln Glu
 145 150 155 160
 Ile Leu Lys Thr Ile Gln Ala Glu Asp Ile Lys Lys Ser Phe Arg Asn
 165 170 175
 Leu Val Gln Leu Tyr Lys Asn Glu Asp Asp Thr Glu Ile Ser Lys Lys
 180 185 190
 Ile Lys Thr Gln Trp Thr Ser Leu Gly Leu Glu Asp Val Gln Phe Val
 195 200 205
 Asn Tyr Ser Val Leu Leu Asp Leu Pro Gly Pro Ser Pro Ser Thr Val
 210 215 220
 Thr Leu Ser Ser Ser Gly Gln Cys Phe His Pro Asn Gly Gln Pro Cys
 225 230 235 240
 Ser Glu Glu Ala Arg Lys Asp Ser Ser Gln Asp Leu Leu Tyr Ser Tyr
 245 250 255
 Ala Ala Tyr Ser Ala Lys Gly Thr Leu Lys Ala Glu Val Ile Asp Val
 260 265 270
 Ser Tyr Gly Met Ala Asp Asp Leu Lys Arg Ile Arg Lys Ile Lys Asn

275	280	285
Val Thr Asn Gln Ile Ala Leu	Leu Lys Leu Gly Lys Leu	Pro Leu Leu
290	295	300
Tyr Lys Leu Ser Ser Leu Glu	Lys Ala Gly Phe Gly Gly	Val Leu Leu
305	310	315
Tyr Ile Asp Pro Cys Asp Leu	Pro Lys Thr Val Asn Pro	Ser His Asp
325	330	335
Thr Phe Met Val Ser Leu Asn	Pro Gly Gly Asp Pro Ser	Thr Pro Gly
340	345	350
Tyr Pro Ser Val Asp Glu Ser	Phe Arg Gln Ser Arg Ser	Asn Leu Thr
355	360	365
Ser Leu Leu Val Gln Pro Ile	Ser Ala Ser Leu Val Ala	Lys Leu Ile
370	375	380
Ser Ser Pro Lys Ala Arg Thr	Lys Asn Glu Ala Cys Ser	Ser Leu Glu
385	390	395
Leu Pro Asn Asn Glu Ile Arg	Val Val Ser Met Gln Val	Gln Thr Val
405	410	415
Thr Lys Leu Lys Thr Val Thr	Asn Val Val Gly Phe Val	Met Gly Leu
420	425	430
Thr Ser Pro Asp Arg Tyr Ile	Ile Val Gly Ser His His	His Thr Ala
435	440	445
His Ser Tyr Asn Gly Gln Glu	Trp Ala Ser Ser Thr Ala	Ile Ile Thr
450	455	460
Ala Phe Ile Arg Ala Leu Met	Ser Lys Val Lys Arg Gly	Trp Arg Pro
465	470	475
Asp Arg Thr Ile Val Phe Cys	Ser Trp Gly Gly Thr Ala	Phe Gly Asn
485	490	495
Ile Gly Ser Tyr Glu Arg Gly	Glu Asp Phe Lys Lys Val	Leu Gln Lys
500	505	510
Asn Val Val Ala Tyr Ile Ser	Leu His Ser Pro Ile Arg	Gly Asn Ser
515	520	525
Ser Leu Tyr Pro Val Ala Ser	Pro Ser Leu Gln Gln Leu	Val Val Glu
530	535	540
Lys Asn Asn Phe Asn Cys Thr	Arg Arg Ala Gln Cys Pro	Glu Thr Asn
545	550	555
Ile Ser Ser Ile Gln Ile Gln	Gly Asp Ala Asp Tyr Phe	Ile Asn His

565 570 575
 Leu Gly Val Pro Ile Val Gln Phe Ala Tyr Glu Asp Ile Lys Thr Leu
 580 585 590
 Glu Ala Glu
 595

<210> 4173

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4173

Met Ala Lys Ala Pro Phe Tyr His Leu Leu Phe Cys Phe Gly Ile Trp
 1 5 10 15
 Ser Asp Ser Tyr Ser Ser Leu Gly Leu Ala Gln Trp Arg Asn Trp Cys
 20 25 30
 Ser Tyr Cys Thr Gly Leu Cys Thr Pro Cys Asn Cys Asp Val Tyr Asp
 35 40 45
 Cys Ser Ser Cys Phe Pro Ile Leu His Phe Gln Ser Pro Arg Ala Val
 50 55 60
 Leu Ser Arg Thr Thr Lys Leu Pro Arg Ile Lys Pro Pro Asn Met Ala
 65 70 75 80
 Tyr Pro Cys Ser Ser Asp Val Ile Leu Val Ala Ser Val Asn Ser Val
 85 90 95
 Cys His Ala Val Gln Thr
 100

<210> 4174

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4174

Met Ile Ile Pro Gly Lys Gly Phe Leu Val Leu Cys Asn Pro Lys Gly

1	5	10	15
Arg Asn Ser Pro Met Gly Gly Arg Ile Leu Leu Gly Met Lys Lys Phe			
20	25	30	
Leu Phe Pro Cys His Glu Cys Pro Ala Arg Glu Gln Gly Gly Ser Val			
35	40	45	
Arg Glu Gly Leu Ser Ser Trp Arg Lys Trp Asp Ser Lys Ser Arg Met			
50	55	60	
Leu Arg Leu Ser Gly Ser Gln Arg Gly Gly Ser Lys Cys Gly Met Trp			
65	70	75	80
Val Ala Leu Trp Phe Ser Gly Ser Val Val Val Pro Ser Thr Ala Asp			
85	90	95	
Phe Met Thr Pro His Leu Ser Pro Ser His Ile Val Tyr Pro Ser Val			
100	105	110	

<210> 4175

<211> 712

<212> PRT

<213> Homo sapiens

<400> 4175

Met Pro Asp Gln Asp Lys Lys Val Lys Thr Thr Glu Lys Ser Thr Asp			
1	5	10	15
Lys Gln Gln Glu Ile Thr Ile Arg Asp Tyr Ser Asp Leu Lys Arg Leu			
20	25	30	
Arg Cys Leu Leu Asn Val Gln Ser Ser Lys Gln Gln Leu Pro Ala Ile			
35	40	45	
Asn Phe Asp Ser Ala Gln Asn Ser Met Thr Lys Ser Glu Pro Ala Ile			
50	55	60	
Arg Ala Gly Gly His Arg Ala Arg Gly Gln Trp His Glu Ser Thr Glu			
65	70	75	80
Ala Val Glu Leu Glu Asn Phe Ser Ile Asn Tyr Lys Asn Glu Arg Asn			
85	90	95	
Phe Ser Lys His Pro Gln Arg Lys Leu Phe Gln Glu Ile Phe Thr Ala			
100	105	110	
Leu Val Lys Asn Arg Leu Ile Ser Arg Glu Trp Val Asn Arg Ala Pro			

115	120	125
Ser Ile His Phe Leu Arg Val	Leu Ile Cys Leu Arg	Leu Leu Met Arg
130	135	140
Asp Pro Cys Tyr Gln Glu Ile	Leu His Ser Leu Gly Gly	Ile Glu Asn
145	150	155
Leu Ala Gln Tyr Met Glu Ile	Val Ala Asn Glu Tyr	Leu Gly Tyr Gly
165	170	175
Glu Glu Gln His Thr Val Asp	Lys Leu Val Asn Met Thr	Tyr Ile Phe
180	185	190
Gln Lys Leu Ala Ala Val Lys	Asp Gln Arg Glu Trp Val	Thr Thr Ser
195	200	205
Gly Ala His Lys Thr Leu Val	Asn Leu Leu Gly Ala Arg	Asp Thr Asn
210	215	220
Val Leu Leu Gly Ser Leu Leu	Ala Leu Ala Ser Leu Ala	Glu Ser Gln
225	230	235
Glu Cys Arg Glu Lys Ile Ser	Glu Leu Asn Ile Val Glu	Asn Leu Leu
245	250	255
Met Ile Leu His Glu Tyr Asp	Leu Leu Ser Lys Arg Leu	Thr Ala Glu
260	265	270
Leu Leu Arg Leu Leu Cys Ala	Glu Pro Gln Val Lys Glu	Gln Val Lys
275	280	285
Leu Tyr Glu Gly Ile Pro Val	Leu Leu Ser Leu Leu His	Ser Asp His
290	295	300
Leu Lys Leu Leu Trp Ser Ile	Val Trp Ile Leu Val Gln	Val Cys Glu
305	310	315
Asp Pro Glu Thr Ser Val Glu	Ile Arg Ile Trp Gly Gly	Ile Lys Gln
325	330	335
Leu Leu His Ile Leu Gln Gly	Asp Arg Asn Phe Val Ser	Asp His Ser
340	345	350
Ser Ile Gly Ser Leu Ser Ser	Ala Asn Ala Ala Gly Arg	Ile Gln Gln
355	360	365
Leu His Leu Ser Glu Asp Leu	Ser Pro Arg Glu Ile Gln	Glu Asn Thr
370	375	380
Phe Ser Leu Gln Ala Ala Cys	Cys Ala Ala Leu Thr Glu	Leu Val Leu
385	390	395
Asn Asp Thr Asn Ala His Gln	Val Val Gln Glu Asn Gly	Val Tyr Thr

	405		410		415										
Ile	Ala	Lys	Leu	Ile	Leu	Pro	Asn	Lys	Gln	Lys	Asn	Ala	Ala	Lys	Ser
	420		425		430										
Asn	Leu	Leu	Gln	Cys	Tyr	Ala	Phe	Arg	Ala	Leu	Arg	Phe	Leu	Phe	Ser
	435		440		445										
Met	Glu	Arg	Asn	Arg	Pro	Leu	Phe	Lys	Arg	Leu	Phe	Pro	Thr	Asp	Leu
	450		455		460										
Phe	Glu	Ile	Phe	Ile	Asp	Ile	Gly	His	Tyr	Val	Arg	Asp	Ile	Ser	Ala
465			470		475				480						
Tyr	Glu	Glu	Leu	Val	Ser	Lys	Leu	Asn	Leu	Leu	Val	Glu	Asp	Glu	Leu
	485		490		495										
Lys	Gln	Ile	Ala	Glu	Asn	Ile	Glu	Ser	Ile	Asn	Gln	Asn	Lys	Ala	Pro
	500		505		510										
Leu	Lys	Tyr	Ile	Gly	Asn	Tyr	Ala	Ile	Leu	Asp	His	Leu	Gly	Ser	Gly
	515		520		525										
Ala	Phe	Gly	Cys	Val	Tyr	Lys	Val	Arg	Lys	His	Ser	Gly	Gln	Asn	Leu
	530		535		540										
Leu	Ala	Met	Lys	Glu	Val	Asn	Leu	His	Asn	Pro	Ala	Phe	Gly	Lys	Asp
545			550		555				560						
Lys	Lys	Asp	Arg	Asp	Ser	Ser	Val	Arg	Asn	Ile	Val	Ser	Glu	Leu	Thr
	565		570		575										
Ile	Ile	Lys	Glu	Gln	Leu	Tyr	His	Pro	Asn	Ile	Val	Arg	Tyr	Tyr	Lys
	580		585		590										
Thr	Phe	Leu	Glu	Asn	Asp	Arg	Leu	Tyr	Ile	Val	Met	Glu	Leu	Ile	Glu
	595		600		605										
Gly	Ala	Pro	Leu	Gly	Glu	His	Phe	Ser	Ser	Leu	Lys	Glu	Lys	His	His
	610		615		620										
His	Phe	Thr	Glu	Glu	Arg	Leu	Trp	Lys	Ile	Phe	Ile	Gln	Leu	Cys	Leu
625			630		635				640						
Ala	Leu	Arg	Tyr	Leu	His	Lys	Glu	Lys	Arg	Ile	Val	His	Arg	Asp	Leu
	645		650		655										
Thr	Pro	Asn	Asn	Ile	Met	Leu	Gly	Asp	Lys	Asp	Lys	Val	Thr	Val	Thr
	660		665		670										
Asp	Phe	Gly	Leu	Ala	Lys	Gln	Lys	Gln	Glu	Asn	Ser	Lys	Leu	Thr	Ser
	675		680		685										
Val	Val	Gly	Thr	Ile	Leu	Tyr	Ser	Cys	Val	Gln	His	Leu	Tyr	Leu	Arg

690 695 700
 Ser Pro Ala Pro Ala Leu Ala Thr
 705 710

<210> 4176

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4176

Met Ser Arg Leu Gly Pro Pro Ala Arg Ile Leu Pro Ser Met Pro Trp
 1 5 10 15
 Lys Met Thr Cys Ser Trp Leu Tyr Val Phe Pro Leu Asn Thr Asp Cys
 20 25 30
 Thr Ser Glu Leu Thr Glu Ala Leu Thr Pro Ser Arg Arg Ser Pro Ala
 35 40 45
 Ala Gly Trp Gly His Gly Gly Ala Val Pro His Phe Leu Arg Ala Pro
 50 55 60
 Pro Pro His Gln Gly Leu Leu Pro Cys His Gly Gly Val Pro Leu Pro
 65 70 75 80
 Ser Ser Ser Pro Thr Gly Val Pro Ser Ser Pro Ala Thr Ser Leu Val
 85 90 95
 Ser Gly Cys Pro His Pro Gly His Ser Gly Gly Glu Gly Val Gly Gly
 100 105 110
 Gly Trp Glu Pro Arg
 115

<210> 4177

<211> 457

<212> PRT

<213> Homo sapiens

<400> 4177

Met Ser Asp Ala Asn Lys Ala Ala Ile Ala Ala Glu Arg Glu Ala Leu
 1 5 10 15
 Asn Leu Lys Leu Pro Pro Ile Val His Leu Pro Glu Asn Ile Gly Ala
 20 25 30
 Asp Thr Pro Thr Gln Ser Lys Leu Leu Lys Tyr Arg Arg Ser Lys Glu
 35 40 45
 Gln Gln Gln Lys Ile Asn Gln Leu Val Ile Asp Gly Ala Lys Arg Asn
 50 55 60
 Leu Asp Arg Thr Leu Gly Lys Arg Thr Pro Leu Leu Pro Pro Pro Asp
 65 70 75 80
 Tyr Pro Gln Thr Met Thr Ser Glu Met Lys Lys Lys Gly Phe Asn Tyr
 85 90 95
 Ile Tyr Met Lys Gln Cys Val Glu Ser Ser Pro Leu Val Pro Ile Gln
 100 105 110
 Gln Glu Trp Leu Asp His Met Leu Arg Leu Ile Pro Glu Ser Leu Lys
 115 120 125
 Glu Gly Lys Glu Arg Glu Glu Leu Leu Glu Ser Leu Ile Asn Glu Val
 130 135 140
 Ser Ser Asp Phe Glu Asn Ser Met Lys Arg Tyr Leu Val Gln Ser Val
 145 150 155 160
 Leu Val Lys Pro Pro Val Lys Ser Leu Glu Asp Glu Gly Gly Pro Leu
 165 170 175
 Pro Glu Ser Pro Val Gly Leu Asp Tyr Ser Asn Pro Trp His Ser Ser
 180 185 190
 Tyr Val Gln Ala Arg Asn Gln Ile Phe Ser Asn Leu His Ile Ile His
 195 200 205
 Pro Thr Met Lys Met Leu Leu Asp Leu Gly Tyr Thr Thr Phe Ala Asp
 210 215 220
 Thr Val Leu Leu Asp Phe Thr Gly Ile Arg Ala Lys Gly Pro Ile Asp
 225 230 235 240
 Cys Glu Ser Leu Lys Thr Asp Leu Ser Ile Gln Thr Arg Asn Ala Glu
 245 250 255
 Glu Lys Ile Met Asn Thr Trp Tyr Pro Lys Val Ile Asn Leu Phe Thr
 260 265 270
 Lys Lys Glu Ala Leu Glu Gly Val Lys Pro Glu Lys Leu Asp Ala Phe

275	280	285
Tyr Ser Cys Val Ser Thr Leu Met Ser Asn Gln Leu Lys Asp Leu Leu		
290	295	300
Arg Arg Thr Val Glu Gly Phe Val Lys Leu Phe Asp Pro Lys Asp Gln		
305	310	315
Gln Arg Leu Pro Ile Phe Lys Ile Glu Leu Thr Phe Asp Asp Asp Lys		
325	330	335
Met Glu Phe Tyr Pro Thr Phe Gln Asp Leu Glu Asp Asn Val Leu Ser		
340	345	350
Leu Val Glu Arg Ile Ala Glu Ala Leu Gln Asn Val Gln Thr Ile Pro		
355	360	365
Ser Trp Leu Ser Gly Thr Ser Thr Pro Val Asn Leu Asp Thr Glu Leu		
370	375	380
Pro Glu His Val Leu His Trp Ala Val Asp Thr Leu Lys Ala Ala Val		
385	390	395
His Arg Asn Leu Glu Gly Ala Arg Lys His Tyr Glu Thr Tyr Val Glu		
405	410	415
Lys Tyr Asn Trp Leu Leu Asp Gly Thr Ala Val Glu Asn Ile Glu Thr		
420	425	430
Phe Gln Thr Glu Asp His Thr Phe Asp Glu Tyr Thr Glu Glu Leu Asp		
435	440	445
Cys Trp Val Val Trp Glu Val Tyr Phe		
450	455	

<210> 4178

<211> 190

<212> PRT

<213> Homo sapiens

<400> 4178

Met Leu Phe Tyr Leu Ser Gly Thr Tyr Tyr Ala Leu Tyr Phe Leu Ala
1 5 10 15
Thr Leu Leu Met Ile Thr Tyr Lys Ser Gln Val Phe Ser Tyr Pro His
20 25 30
Arg Tyr Leu Val Leu Asp Leu Ala Leu Leu Phe Leu Met Gly Ile Leu

35	40	45
Glu Ala Val Arg Leu Tyr Leu Gly Thr Arg Gly Asn Leu Thr Glu Ala		
50	55	60
Glu Arg Pro Leu Ala Ala Ser Leu Ala Leu Thr Ala Gly Thr Ala Leu		
65	70	75
Leu Ser Ala His Phe Leu Leu Trp Gln Ala Leu Val Leu Trp Ala Asp		
85	90	95
Trp Ala Leu Ser Ala Thr Leu Leu Ala Leu His Gly Leu Glu Ala Val		
100	105	110
Leu Gln Val Val Ala Ile Ala Ala Phe Thr Ser His Thr Ser Pro Phe		
115	120	125
Arg Gly Phe Gly Gly Glu Val Arg Ala Lys Ala Gly Asp Glu Thr Ala		
130	135	140
Gly Glu Arg Ala Ala Glu Gly His Ile Arg Ser Leu Arg Pro Leu Gln		
145	150	155
Phe Tyr Gln Leu Leu Pro Phe Ala Arg Ser Ala Lys Gln Ile Leu Ala		
165	170	175
Leu Cys Phe Phe Pro Ile Pro Arg Phe Thr Ile Ser Ser Pro		
180	185	190

<210> 4179

<211> 215

<212> PRT

<213> Homo sapiens

<400> 4179

Met Asn Leu Ala Cys Gly Glu Asp Val Ser Thr Asn Gly Gln Leu Gly
1 5 10 15
Pro Lys Glu Asp Thr Gly Ser Asn Thr Glu Thr Asn Gln Ile Leu Pro
20 25 30
Arg Pro Ser Cys Tyr Gln Thr Thr Leu Val Gln Gly Trp Leu Leu Cys
35 40 45
Thr Gly Gln Ser His Pro Ile Pro Thr Gln Ala Leu Cys Pro Ala Thr
50 55 60
Leu Ala Ser Ser Trp Pro Ser His Gln Ala Lys Gln Gly Arg Gly Met

65 70 75 80
 Gly Met Pro Thr His Pro Tyr Gln Leu Cys Arg His Arg Thr Met His
 85 90 95
 Ser Ser Trp Glu Glu Ser Asp Glu Leu Leu Lys Ala Gln Glu Gly Pro
 100 105 110
 Ala Gln Trp Ser Ala Trp Gln Gly Gln Cys Phe Ser Gln Gly Arg Asp
 115 120 125
 Gly Gly Arg Leu Thr Arg Asp Pro Gln Gly Gly Arg Cys Ile Ser Val
 130 135 140
 Leu Phe Pro Asp Asn Lys Asp Val Ser Val Met Met Ser Glu Met Asp
 145 150 155 160
 Val Asn Val Ile Ala Gly Thr Leu Lys Leu Tyr Phe Arg Glu Leu Pro
 165 170 175
 Glu Pro Leu Phe Thr Asp Glu Phe Tyr Pro Asn Phe Ala Glu Gly Ile
 180 185 190
 Gly Glu His Trp Arg Pro Trp Pro His Gly Arg Arg Leu Leu His Val
 195 200 205
 His Cys Cys Pro Trp Arg Leu
 210 215

<210> 4180

<211> 783

<212> PRT

<213> Homo sapiens

<400> 4180

Met Leu Ser Asp Leu Thr Leu Gln Leu Arg Gln Arg Gln Glu Asn Thr
 1 5 10 15
 Ile Ile Glu Asn Pro Asp Val Pro Gln Asp Phe Gly Asn Gln Gly Ser
 20 25 30
 Thr Val Glu Ser Leu Cys Asp Asp Val Val Ser Val Leu Thr Val Leu
 35 40 45
 Cys Glu Lys Leu Gln Ala Ala Ile Asn Asp Ser Gln Gln Leu Gln Leu
 50 55 60
 Leu Tyr Leu Glu Cys Ile Leu Ser Val Leu Ser Ser Ser Ser Ser Ser

65	70	75	80
Met His Leu His Arg Arg Phe Thr Asp Leu Ile Trp Lys Asn Leu Cys			
	85	90	95
Pro Ala Leu Ile Val Ile Leu Gly Asn Pro Ile His Asp Lys Thr Ile			
	100	105	110
Thr Ser Ala His Thr Ser Ser Thr Ser Thr Ser Leu Glu Ser Asp Ser			
	115	120	125
Ala Ser Pro Gly Val Ser Asp His Gly Arg Gly Ser Gly Cys Ser Cys			
	130	135	140
Thr Ala Pro Ala Leu Ser Gly Pro Val Ala Arg Thr Ile Tyr Tyr Ile			
145	150	155	160
Ala Ala Glu Leu Val Arg Leu Val Gly Ser Val Asp Ser Met Lys Pro			
	165	170	175
Val Leu Gln Ser Leu Tyr His Arg Val Leu Leu Tyr Pro Pro Pro Gln			
	180	185	190
His Arg Val Glu Ala Ile Lys Ile Met Lys Glu Ile Leu Gly Ser Pro			
	195	200	205
Gln Arg Leu Cys Asp Leu Ala Gly Pro Ser Ser Thr Glu Ser Glu Ser			
	210	215	220
Arg Lys Arg Ser Ile Ser Lys Arg Lys Ser His Leu Asp Leu Leu Lys			
225	230	235	240
Leu Ile Met Asp Gly Met Thr Glu Ala Cys Ile Lys Gly Gly Ile Glu			
	245	250	255
Ala Cys Tyr Ala Ala Val Ser Cys Val Cys Thr Leu Leu Gly Ala Leu			
	260	265	270
Asp Glu Leu Ser Gln Gly Lys Gly Leu Ser Glu Gly Gln Val Gln Leu			
	275	280	285
Leu Leu Leu Arg Leu Glu Glu Leu Lys Asp Gly Ala Glu Trp Ser Arg			
	290	295	300
Asp Ser Met Glu Ile Asn Glu Ala Asp Phe Arg Trp Gln Arg Arg Val			
305	310	315	320
Leu Ser Ser Glu His Thr Pro Trp Glu Ser Gly Asn Glu Arg Ser Leu			
	325	330	335
Asp Ile Ser Ile Ser Val Thr Thr Asp Thr Gly Gln Thr Thr Leu Glu			
	340	345	350
Gly Glu Leu Gly Gln Thr Thr Pro Glu Asp His Ser Gly Asn His Lys			

355	360	365
Asn Ser Leu Lys Ser Pro Ala Ile Pro Glu Gly Lys Glu Thr Leu Ser		
370	375	380
Lys Val Leu Glu Thr Glu Ala Val Asp Gln Pro Asp Val Val Gln Arg		
385	390	395
Ser His Thr Val Pro Tyr Pro Asp Ile Thr Asn Phe Leu Ser Val Asp		
405	410	415
Cys Arg Thr Arg Ser Tyr Gly Ser Arg Tyr Ser Glu Ser Asn Phe Ser		
420	425	430
Val Asp Asp Gln Asp Leu Ser Arg Thr Glu Phe Asp Ser Cys Asp Gln		
435	440	445
Tyr Ser Met Ala Ala Glu Lys Asp Ser Gly Arg Ser Asp Val Ser Asp		
450	455	460
Ile Gly Ser Asp Asn Cys Ser Leu Ala Asp Glu Glu Gln Thr Pro Arg		
465	470	475
Asp Cys Leu Gly His Arg Ser Leu Arg Thr Ala Ala Leu Ser Leu Lys		
485	490	495
Leu Leu Lys Asn Gln Glu Ala Asp Gln His Ser Ala Arg Leu Phe Ile		
500	505	510
Gln Ser Leu Glu Gly Leu Leu Pro Arg Leu Leu Ser Leu Ser Asn Val		
515	520	525
Glu Glu Val Asp Thr Ala Leu Gln Asn Phe Ala Ser Thr Phe Cys Ser		
530	535	540
Gly Met Met His Ser Pro Gly Phe Asp Gly Asn Ser Ser Leu Ser Phe		
545	550	555
Gln Met Leu Met Asn Ala Asp Ser Leu Tyr Thr Ala Ala His Cys Ala		
565	570	575
Leu Leu Leu Asn Leu Lys Leu Ser His Gly Asp Tyr Tyr Arg Lys Arg		
580	585	590
Pro Thr Leu Ala Pro Gly Val Met Lys Asp Phe Met Lys Gln Val Gln		
595	600	605
Thr Ser Gly Val Leu Met Val Phe Ser Gln Ala Trp Ile Glu Glu Leu		
610	615	620
Tyr His Gln Val Leu Asp Arg Asn Met Leu Gly Glu Ala Gly Tyr Trp		
625	630	635
Gly Ser Pro Glu Asp Asn Ser Leu Pro Leu Ile Thr Met Leu Thr Asp		

	645		650		655										
Ile	Asp	Gly	Leu	Glu	Ser	Ser	Ala	Ile	Gly	Gly	Gln	Leu	Met	Ala	Ser
	660		665		670										
Ala	Ala	Thr	Glu	Ser	Pro	Phe	Ala	Gln	Ser	Arg	Arg	Ile	Asp	Asp	Ser
	675		680		685										
Thr	Val	Ala	Gly	Val	Ala	Phe	Ala	Arg	Tyr	Ile	Leu	Val	Gly	Cys	Trp
	690		695		700										
Lys	Asn	Leu	Ile	Asp	Thr	Leu	Ser	Thr	Pro	Leu	Thr	Gly	Arg	Met	Ala
705			710		715									720	
Gly	Ser	Ser	Lys	Glu	Leu	Ala	Phe	Ile	Leu	Gly	Ala	Glu	Gly	Ile	Lys
	725		730		735										
Glu	Gln	Asn	Gln	Lys	Glu	Arg	Asp	Ala	Ile	Cys	Met	Ser	Leu	Asp	Gly
	740		745		750										
Leu	Arg	Lys	Ala	Ala	Arg	Leu	Ser	Cys	Ala	Leu	Gly	Val	Ala	Ala	Asn
	755		760		765										
Cys	Ala	Ser	Ala	Leu	Ala	Gln	Met	Ala	Ala	Ala	Ser	Cys	Val	Gln	
	770		775		780										

<210> 4181

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4181

Met	Thr	Asp	Arg	Asp	Ala	Gln	Trp	Arg	Pro	Leu	Ser	Arg	Pro	Leu	Gly
1					5				10					15	
Thr	Arg	Pro	His	Ala	Pro	Leu	Ala	Pro	Ala	Cys	Val	Arg	Arg	Pro	Trp
			20					25					30		
Ala	Gly	Lys	Ala	Pro	Gly	Ser	Val	Ser	Ser	Val	Ser	Ser	Gln	Leu	Pro
		35					40					45			
Ala	Leu	Gln	Pro	Pro	Arg	Leu	Leu	Val	Ile	Phe	Cys	Phe	Lys	Val	Ala
	50					55					60				
Phe	Cys	Val	Phe	Phe	Ser	His	Phe	Ser	Ser	Ser	Ser	Ser	Ser	Cys	His
65					70					75				80	

<211> 497

<212> PRT

<213> Homo sapiens

<400> 4182

Met	Glu	Ser	Gly	Leu	Ser	Trp	Val	Phe	Leu	Val	Ala	Leu	Leu	Arg	Gly
1				5					10					15	
Val	Gln	Cys	Gln	Phe	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln
			20						25					30	
Ser	Gly	Arg	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Tyr	Gly	Phe	Met	Leu
		35						40					45		
Arg	Thr	Asn	Leu	Met	Tyr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50						55				60				
Glu	Trp	Leu	Ala	Val	Ser	Ser	Tyr	Asp	Gly	His	Thr	Asp	His	Tyr	Ala
65					70					75					80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Val	Ser	Arg	Asp	Asn	Ser	Met	Asn
			85							90					95
Arg	Leu	Tyr	Leu	Gln	Met	Arg	Asn	Leu	Arg	Pro	Asp	Asp	Thr	Ala	Met
		100							105				110		
Tyr	His	Cys	Ala	Arg	Val	Gly	Tyr	Asp	Asp	Asn	Thr	Val	Arg	Asp	Leu
	115							120				125			
Tyr	Tyr	Met	Asp	Val	Trp	Gly	Lys	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser
	130						135				140				
Ala	Ser	Pro	Thr	Ser	Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu	Cys	Ser	Thr
145					150					155					160
Gln	Pro	Asp	Gly	Asn	Val	Val	Ile	Ala	Cys	Leu	Val	Gln	Gly	Phe	Phe
			165						170					175	

Pro	Gln	Glu	Pro	Leu	Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly	Gln	Gly	Val
180				185				190							
Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr
195				200				205							
Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu	Ala	Gly
210				215				220							
Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp
225				230				235				240			
Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro
245				250				255							
Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser
260				265				270							
Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn
275				280				285							
Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp	Ala	Ser	Gly	Val	Thr	Phe
290				295				300							
Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala	Val	Gln	Gly	Pro	Pro	Asp
305				310				315				320			
Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro	Gly	Cys
325				330				335							
Ala	Glu	Pro	Trp	Asn	His	Gly	Lys	Thr	Phe	Thr	Cys	Thr	Ala	Ala	Tyr
340				345				350							
Pro	Glu	Ser	Lys	Thr	Pro	Leu	Thr	Ala	Thr	Leu	Ser	Lys	Ser	Gly	Asn
355				360				365							
Thr	Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro	Pro	Pro	Ser	Glu	Glu	Leu
370				375				380							
Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys	Leu	Ala	Arg	Gly	Phe	Ser
385				390				395				400			
Pro	Lys	Asp	Val	Leu	Val	Arg	Trp	Leu	Gln	Gly	Ser	Gln	Glu	Leu	Pro
405				410				415							
Arg	Glu	Lys	Tyr	Leu	Thr	Trp	Ala	Ser	Arg	Gln	Glu	Pro	Ser	Gln	Gly
420				425				430							
Thr	Thr	Thr	Phe	Ala	Val	Thr	Ser	Ile	Leu	Arg	Val	Ala	Ala	Glu	Asp
435				440				445							
Trp	Lys	Lys	Gly	Asp	Thr	Phe	Ser	Cys	Met	Val	Gly	His	Glu	Ala	Leu
450				455				460							

Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro
 465 470 475 480
 Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys
 485 490 495
 Tyr

<210> 4183

<211> 568

<212> PRT

<213> Homo sapiens

<400> 4183

Met Glu His Leu Trp Phe Phe Leu Leu Leu Leu Val Ala Pro Pro Arg
 1 5 10 15
 Arg Val Leu Ser Gln Val Arg Leu Lys Glu Trp Gly Ala Lys Thr Trp
 20 25 30
 Lys Pro Ser Glu Thr Leu Ser Leu Val Cys Arg Val Asp Gly Gly Pro
 35 40 45
 Phe Asn Leu Tyr Ser Trp Ser Trp Ile Arg Gln Gly Ser Gly Lys Gly
 50 55 60
 Leu Glu Trp Leu Gly Glu Ile Thr Pro Gly Gly Pro Thr His Ser Asn
 65 70 75 80
 Pro Ser Leu Ala Ser Arg Val Val Leu Ser Val Asp Thr Ser Lys Asn
 85 90 95
 His Val Ser Leu Lys Leu Leu Ser Leu Thr Val Ala Asp Thr Ala Val
 100 105 110
 Tyr Phe Cys Ala Ala Arg Asn Pro Ser Ala Gly Ala Ala Glu Tyr Trp
 115 120 125
 Gly Pro Gly Ser Pro Val Ile Val Ser Ser Ala Pro Thr Lys Ala Pro
 130 135 140
 Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser
 145 150 155 160
 Pro Val Val Leu Ala Cys Leu Ile Thr Gly Tyr His Pro Thr Ser Val
 165 170 175

Thr Val Thr Trp Tyr Met Gly Thr Gln Ser Gln Pro Gln Arg Thr Phe			
180	185	190	
Pro Glu Ile Gln Arg Arg Asp Ser Tyr Tyr Met Thr Ser Ser Gln Leu			
195	200	205	
Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly Glu Tyr Lys Cys Val Val			
210	215	220	
Gln His Thr Ala Ser Lys Ser Lys Lys Glu Ile Phe Arg Trp Pro Glu			
225	230	235	240
Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala Gln Pro Gln Ala			
245	250	255	
Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala Thr Thr Arg Asn			
260	265	270	
Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys Glu Lys Glu Glu			
275	280	285	
Gln Glu Glu Arg Glu Thr Lys Thr Pro Glu Cys Pro Ser His Thr Gln			
290	295	300	
Pro Leu Gly Val Tyr Leu Leu Thr Pro Ala Val Gln Asp Leu Trp Leu			
305	310	315	320
Arg Asp Lys Ala Thr Phe Thr Cys Phe Val Val Gly Ser Asp Leu Lys			
325	330	335	
Asp Ala His Leu Thr Trp Glu Val Ala Gly Lys Val Pro Thr Gly Gly			
340	345	350	
Val Glu Glu Gly Leu Leu Glu Arg His Ser Asn Gly Ser Gln Ser Gln			
355	360	365	
His Ser Arg Leu Thr Leu Pro Arg Ser Leu Trp Asn Ala Gly Thr Ser			
370	375	380	
Val Thr Cys Thr Leu Asn His Pro Ser Leu Pro Pro Gln Arg Leu Met			
385	390	395	400
Ala Leu Arg Glu Pro Ala Ala Gln Ala Pro Val Lys Leu Ser Leu Asn			
405	410	415	
Leu Leu Ala Ser Ser Asp Pro Pro Glu Ala Ala Ser Trp Leu Leu Cys			
420	425	430	
Glu Val Ser Gly Phe Ser Pro Pro Asn Ile Leu Leu Met Trp Leu Glu			
435	440	445	
Asp Gln Arg Glu Val Asn Thr Ser Gly Phe Ala Pro Ala Arg Pro Pro			
450	455	460	

Pro Gln Pro Gly Ser Thr Thr Phe Trp Ala Trp Ser Val Leu Arg Val
 465 470 475 480
 Pro Ala Pro Pro Ser Pro Gln Pro Ala Thr Tyr Thr Cys Val Val Ser
 485 490 495
 His Glu Asp Ser Arg Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val
 500 505 510
 Ser Tyr Leu Ala Met Thr Pro Leu Ile Pro Gln Ser Lys Asp Glu Asn
 515 520 525
 Ser Asp Asp Tyr Ser Thr Phe Asp Asp Val Gly Ser Leu Trp Thr Thr
 530 535 540
 Leu Ser Thr Phe Val Ala Leu Phe Ile Leu Thr Leu Leu Tyr Ser Gly
 545 550 555 560
 Ile Val Thr Phe Ile Lys Val Lys
 565

<210> 4184

<211> 478

<212> PRT

<213> Homo sapiens

<400> 4184

Met Asp Trp Thr Trp Thr Ile Leu Phe Leu Val Ala Gly Ala Thr Gly
 1 5 10 15
 Val Lys Ser Gln Ala Gln Leu Leu Gln Ser Gly Pro Glu Ala Glu Arg
 20 25 30
 Pro Gly Ala Ser Val Arg Val Ser Cys Arg Ala Ser Gly Tyr Asp Phe
 35 40 45
 Arg Thr Phe Ala Val Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 50 55 60
 Glu Trp Met Gly Trp Val Asn Thr Asp Gln Gly Asp Thr His Tyr Ala
 65 70 75 80
 Arg Arg Phe Gln Gly Arg Val Ser Met Thr Thr Asp Thr Ser Thr Ser
 85 90 95
 Thr Ala Tyr Leu Glu Leu Arg Arg Leu Thr Phe Asp Asp Thr Ala Val
 100 105 110

Tyr Phe Cys Ala Arg Leu Leu Leu Pro Asn Gly Arg Asn Trp Ala Gln
 115 120 125
 Trp Lys Asn Tyr Tyr Ala Phe Asp Val Trp Gly His Gly Thr Thr Val
 130 135 140
 Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 145 150 155 160
 Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 165 170 175
 Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 180 185 190
 Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 195 200 205
 Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 210 215 220
 Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 225 230 235 240
 Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 245 250 255
 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 260 265 270
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
 275 280 285
 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
 290 295 300
 Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
 305 310 315 320
 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
 325 330 335
 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
 340 345 350
 Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
 355 360 365
 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
 370 375 380
 Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
 385 390 395 400

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
 405 410 415
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
 420 425 430
 Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
 435 440 445
 Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
 450 455 460
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 4185

<211> 548

<212> PRT

<213> Homo sapiens

<400> 4185

Met Ser Ala Gly Asp Ala Val Cys Thr Gly Trp Leu Val Lys Ser Pro
 1 5 10 15
 Pro Glu Arg Lys Leu Gln Arg Tyr Ala Trp Arg Lys Arg Trp Phe Val
 20 25 30
 Leu Arg Arg Gly Arg Met Ser Gly Asn Pro Asp Val Leu Glu Tyr Tyr
 35 40 45
 Arg Asn Lys His Ser Ser Lys Pro Ile Arg Val Ile Asp Leu Ser Glu
 50 55 60
 Cys Ala Val Trp Lys His Val Gly Pro Ser Phe Val Arg Lys Glu Phe
 65 70 75 80
 Gln Asn Asn Phe Val Phe Ile Val Lys Thr Thr Ser Arg Thr Phe Tyr
 85 90 95
 Leu Val Ala Lys Thr Glu Gln Glu Met Gln Val Trp Val His Ser Ile
 100 105 110
 Ser Gln Val Cys Asn Leu Gly His Leu Glu Asp Gly Ala Ala Asp Ser
 115 120 125
 Met Glu Ser Leu Ser Tyr Thr Pro Ser Ser Leu Gln Pro Ser Ser Ala
 130 135 140

Ser Ser Leu Leu Thr Ala His Ala Ala Ser Ser Ser Leu Pro Arg Asp
 145 150 155 160
 Asp Pro Asn Thr Asn Ala Val Ala Thr Glu Glu Thr Arg Ser Glu Ser
 165 170 175
 Glu Leu Leu Phe Leu Pro Asp Tyr Leu Val Leu Ser Asn Cys Glu Thr
 180 185 190
 Gly Arg Leu His His Thr Ser Leu Pro Thr Arg Cys Asp Ser Trp Ser
 195 200 205
 Asn Ser Asp Arg Ser Leu Glu Gln Ala Ser Phe Asp Asp Val Phe Val
 210 215 220
 Asp Cys Leu Gln Pro Leu Pro Ser Ser His Leu Val His Pro Ser Cys
 225 230 235 240
 His Gly Ser Gly Ala Gln Glu Val Pro Ser Ser Arg Pro Gln Ala Ala
 245 250 255
 Leu Ile Trp Ser Arg Glu Ile Asn Gly Pro Pro Arg Asp His Leu Ser
 260 265 270
 Ser Ser Pro Leu Leu Glu Ser Ser Leu Ser Ser Thr Ile Gln Val Asp
 275 280 285
 Lys Asn Gln Gly Ser Leu Pro Cys Gly Ala Lys Glu Leu Asp Ile Met
 290 295 300
 Ser Asn Thr Pro Pro Pro Arg Pro Pro Lys Pro Ser His Leu Ser Glu
 305 310 315 320
 Arg Arg Gln Glu Glu Trp Ser Thr His Ser Gly Ser Lys Lys Pro Glu
 325 330 335
 Cys Thr Leu Val Pro Arg Arg Ile Ser Leu Ser Gly Leu Asp Asn Met
 340 345 350
 Arg Thr Trp Lys Ala Asp Val Glu Gly Gln Ser Leu Arg His Arg Asp
 355 360 365
 Lys Arg Leu Ser Leu Asn Leu Pro Cys Arg Phe Ser Pro Met Tyr Pro
 370 375 380
 Thr Ala Ser Ala Ser Ile Glu Asp Ser Tyr Val Pro Met Ser Pro Gln
 385 390 395 400
 Ala Gly Ala Ser Gly Leu Gly Pro His Cys Ser Pro Asp Asp Tyr Ile
 405 410 415
 Pro Met Asn Ser Gly Ser Ile Ser Ser Pro Leu Pro Glu Leu Pro Ala
 420 425 430

Asn Leu Glu Pro Pro Pro Val Asn Arg Asp Leu Lys Pro Gln Arg Lys
 435 440 445
 Ser Arg Pro Pro Pro Leu Asp Leu Arg Asn Leu Ser Ile Ile Arg Glu
 450 455 460
 His Ala Ser Leu Thr Arg Thr Arg Thr Val Pro Cys Ser Arg Thr Ser
 465 470 475 480
 Phe Leu Ser Pro Glu Arg Asn Gly Ile Asn Ser Ala Arg Phe Phe Ala
 485 490 495
 Asn Pro Val Ser Arg Glu Asp Glu Glu Ser Tyr Ile Glu Met Lys Leu
 500 505 510
 Leu Leu Ser Glu Glu Gln Arg Val Asp Tyr Val Gln Val Asp Glu Gln
 515 520 525
 Lys Thr Gln Ala Leu Gln Ser Thr Lys Gln Glu Trp Thr Asp Glu Arg
 530 535 540
 Gln Ser Lys Val
 545

<210> 4186

<211> 304

<212> PRT

<213> Homo sapiens

<400> 4186

Met Asn Ile Val Phe Ser Arg Asp Ser Gln Val Arg Val Met Glu Asn
 1 5 10 15
 Thr Val Ala Asn Thr Glu Lys Tyr Phe Gly Gln Phe Cys Ser Leu Leu
 20 25 30
 Ala Ala Tyr Thr Arg Lys Thr Ala Arg Leu Arg Asp Lys Ala Asp Gln
 35 40 45
 Leu Val Lys Gln Leu Ile Asp Phe Ala Asn Ser Glu Asn Pro Glu Leu
 50 55 60
 Arg Ala Thr Met Arg Gly Phe Ala Glu Asp Leu Ala Lys Val Gln Asp
 65 70 75 80
 Tyr Arg Gln Ala Gln Val Glu Arg Leu Glu Thr Lys Val Val Asn Pro
 85 90 95

Leu Lys Leu Tyr Gly Ala Gln Ile Lys Gln Thr Arg Ala Glu Ile Lys
 100 105 110
 Lys Phe Lys His Val Gln Asn His Glu Ile Lys Gln Leu Glu Lys Leu
 115 120 125
 Glu Lys Leu Arg Gln Lys Ser Pro Ser Asp Gln Gln Met Ile Ser Gln
 130 135 140
 Ala Glu Thr Arg Val Gln Arg Ala Ala Val Asp Ser Ser Arg Thr Thr
 145 150 155 160
 Leu Gln Leu Glu Glu Thr Val Asp Gly Phe Gln Arg Gln Lys Leu Lys
 165 170 175
 Asp Leu Gln Lys Phe Phe Cys Asp Phe Val Thr Ile Glu Met Val Phe
 180 185 190
 His Ala Lys Ala Val Glu Val Tyr Ser Ser Ala Phe Gln Thr Leu Glu
 195 200 205
 Lys Tyr Asp Leu Glu Arg Asp Leu Leu Asp Phe Arg Ala Lys Met Gln
 210 215 220
 Gly Val Tyr Gly His Tyr Asp Thr Arg Leu Leu Ala Asn Thr Ser Pro
 225 230 235 240
 Pro Pro Ser Val Leu Gln Ser Leu Ala Ser Gln Gly Thr Leu Gln Val
 245 250 255
 Gln Leu Ser Arg Ala Asn Glu Asp Pro Glu His Pro His Ala Asn His
 260 265 270
 Gly Arg Phe Ser Leu Cys Glu Trp Val Val Lys Gly Gln Pro Ala His
 275 280 285
 Cys Val Cys Gly Gln Gly Gly His Leu Met Leu Pro Gly His Ser Leu
 290 295 300

<210> 4187

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4187

Met Asn Ala Ala Ser Pro Leu Gly Ala Trp Val Arg Val Trp Arg His
 1 5 10 15

Gln Ser Trp Pro Val Cys Asp Ser Pro Gly Ser Ser Thr Ser Ser Leu
 20 25 30
 Ala Pro Gly Pro Glu Pro Gly Pro Gln Pro Ala Leu His Val Gln Ala
 35 40 45
 Gln Val Asn Asn Ser Asn Asn Lys Lys Gly Thr Phe Thr Asp Asp Leu
 50 55 60
 His Lys Leu Val Asp Glu Trp Thr Ser Lys Thr Val Gly Ala Ala Gln
 65 70 75 80
 Leu Lys Pro Thr Leu Asn Gln Leu Lys Gln Thr Gln Lys Leu Gln Asp
 85 90 95
 Met Glu Ala Gln Ala Gly Trp Ala Ala Pro Gly Glu Ala Arg Ala Met
 100 105 110
 Thr Ala Pro Arg Ala Gly Val Gly Met Pro Arg Leu Pro Pro Ala Pro
 115 120 125
 Gly Pro Leu Ser Thr Thr Val Ile Pro Gly Ala Ala Pro Thr Leu Ser
 130 135 140
 Val Pro Thr Pro Asp Pro Glu Ser Glu Lys Pro Asp
 145 150 155

<210> 4188

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4188

Met Pro Lys Glu Leu Glu Ser Gly Ser His Glu Ser Pro Asp Asp Ser
 1 5 10 15
 Ser Ser Thr Ala Gln Thr Leu Glu Leu Leu Cys His Leu Asp Asn Thr
 20 25 30
 Ala His Gly Asn Met Ala Cys Val Val Trp Glu Pro Met Gly Asp Gly
 35 40 45
 Lys Lys Ile Ile Ser Leu Ala Asp Asn His Ile Leu Leu Trp Asp Leu
 50 55 60
 Gln Glu Ser Ser Ser Gln Ala Val Leu Ala Ser Ser Ala Ser Leu Glu
 65 70 75 80

Gly Lys Gly Gln Leu Lys Phe Thr Ser Gly Arg Trp Ser Pro His His
 85 90 95
 Asn Cys Thr Gln Val Ala Thr Ala Asn Asp Thr Thr Leu Arg Gly Trp
 100 105 110
 Asp Thr Arg Ser Met Arg Ser Thr Ala
 115 120

<210> 4189

<211> 230

<212> PRT

<213> Homo sapiens

<400> 4189

Met Ala Phe Val Lys Ser Gly Trp Leu Leu Arg Gln Ser Thr Ile Leu
 1 5 10 15
 Lys Arg Trp Lys Lys Asn Trp Phe Asp Leu Trp Ser Asp Gly His Leu
 20 25 30
 Ile Tyr Tyr Asp Asp Gln Thr Arg Gln Asn Ile Glu Asp Lys Val His
 35 40 45
 Met Pro Met Asp Cys Ile Asn Ile Arg Thr Gly Gln Glu Cys Arg Asp
 50 55 60
 Thr Gln Pro Pro Asp Gly Lys Ser Lys Asp Cys Met Leu Gln Ile Val
 65 70 75 80
 Cys Arg Asp Gly Lys Thr Ile Ser Leu Cys Ala Glu Ser Thr Asp Asp
 85 90 95
 Cys Leu Ala Trp Lys Phe Thr Leu Gln Asp Ser Arg Thr Asn Thr Ala
 100 105 110
 Tyr Val Gly Ser Ala Val Met Thr Asp Glu Thr Ser Val Val Ser Ser
 115 120 125
 Pro Pro Pro Tyr Thr Ala Tyr Ala Ala Pro Ala Pro Glu Val Gly Arg
 130 135 140
 Thr Leu Ser Leu Gln Gln Ala Tyr Gly Tyr Gly Pro Tyr Gly Gly Ala
 145 150 155 160
 Tyr Pro Pro Gly Thr Gln Val Val Tyr Ala Ala Asn Gly Gln Ala Tyr
 165 170 175

Ala Val Pro Tyr Gln Tyr Pro Tyr Ala Gly Leu Tyr Gly Gln Gln Pro
 180 185 190
 Ala Asn Gln Val Ile Ile Arg Glu Arg Tyr Arg Asp Asn Gly Ser Asp
 195 200 205
 Leu Ala Leu Gly Met Leu Ala Gly Ala Ala Thr Gly Met Ala Leu Gly
 210 215 220
 Ser Leu Phe Trp Val Phe

 225 230

<210> 4190

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4190

Met Lys Ser Ala Val Ile Thr Pro Cys Ser His Phe Phe His Ala Gly
 1 5 10 15
 Cys Leu Lys Lys Trp Leu Tyr Val Gln Glu Thr Cys Pro Leu Cys His
 20 25 30
 Cys His Leu Lys Asn Ser Ser Gln Leu Pro Gly Leu Gly Thr Glu Pro
 35 40 45
 Val Leu Gln Pro His Ala Gly Ala Glu Gln Asn Val Met Phe Gln Glu
 50 55 60
 Gly Thr Glu Pro Pro Gly Gln Glu His Thr Pro Gly Thr Arg Ile Gln
 65 70 75 80
 Glu Gly Ser Arg Asp Asn Asn Glu Tyr Ile Ala Arg Arg Pro Asp Asn
 85 90 95
 Gln Glu Gly Ala Phe Asp Pro Lys Glu Tyr Pro His Ser Ala Lys Asp
 100 105 110
 Glu Ala His Pro Val Glu Ser Ala
 115 120

<210> 4191

<211> 163

<212> PRT

<213> Homo sapiens

<400> 4191

Met Arg Val Pro Pro Ala Gly Thr Trp Ala Leu Arg Pro Ile Trp Thr
 1 5 10 15
 Glu Met Gly Thr Pro Leu Arg Gly Ser Gln Ala Pro Gly Arg Ile Val
 20 25 30
 Leu Leu Leu Leu Val Ile Thr Pro Gln Trp Arg Trp Ile Pro Ser Lys
 35 40 45
 Thr Pro Asn Val Ala Pro Arg Ser Asn Gln Arg Cys Asn Pro Gly Gly
 50 55 60
 Tyr Leu Ser Gly Gly Val Ser Leu Cys Ala Ser His Ser Gln Pro Ala
 65 70 75 80
 Ala Leu Pro Asn Leu Gly Arg Leu Gln Lys Lys Leu Leu Gln Thr Arg
 85 90 95
 Cys Lys Gly Arg Arg Met Cys Pro Lys Ala Gly Asp Gln Thr Gly Gly
 100 105 110
 Ala Phe Cys Met Cys Asp Val Ser Gly Gly Gly Gly Glu Cys Val Ser
 115 120 125
 Gly Ser Gly Gly Gly Gly Glu Ser Gly Arg Lys Thr Gly Thr Thr Ser
 130 135 140
 Ala Met Lys Asp Pro Arg Val Leu Lys Cys Lys Leu Arg Val Thr Asn
 145 150 155 160
 Asp Leu His

<210> 4192

<211> 109

<212> PRT

<213> Homo sapiens

<400> 4192

Met Gly Phe His His Phe Gly Gln Ala Gly Leu Gln Leu Val Thr Ser

1	5	10	15
Gly Asp Leu Ser Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val			
20	25	30	
Ser His Cys Thr Gln Pro Trp Trp Val Phe Cys Arg Glu Gln Phe Gln			
35	40	45	
Lys Asp Phe Trp Trp Gln Pro Leu Ser Leu Trp Leu Thr Asp Met Gly			
50	55	60	
Lys Ile Ile Gln Lys Thr Tyr Leu Arg Gln Asp Val Glu Asn Ser Thr			
65	70	75	80
Val Ile Ser Leu Tyr Leu Asn Thr Thr Ser Asn Asn Val Tyr Asp Arg			
85	90	95	
Val Asp His Phe His Glu Gly Ile Thr Ser Leu Ala Val			
100	105		

<210> 4193

<211> 976

<212> PRT

<213> Homo sapiens

<400> 4193

Met Asn Thr Gln Lys Gly Ser Leu Thr Ile Asn Val His Arg Gly Ser			
1	5	10	15
Leu Ala Met Ser Ile Gln Arg Gly Ser Leu Val Pro Arg Asp Met Asp			
20	25	30	
Ser Ser Gly Arg Asp Met Gln Leu Arg Val Ile Pro Ala Glu Val Lys			
35	40	45	
Phe Leu Asp Thr Met Ala Gly Arg Val Tyr Arg Leu Pro Ile Thr Val			
50	55	60	
His Asn Ile Cys Arg Trp Asn Gln Lys Ile Arg Phe Lys Glu Pro Val			
65	70	75	80
Lys Pro Gln Phe Lys Leu Met Leu Thr Ser Leu Asp Lys Glu Leu Ala			
85	90	95	
Ser Gly Leu Gln Met Thr Ala Met Val Glu Tyr His Pro Asp Lys Asp			
100	105	110	
Glu Asp Thr Phe Asp Arg Leu Leu Ile Ser Ile Glu Asn Lys Thr Thr			

115	120	125
Glu Ile Pro Leu Ile Gly Leu Ile Pro Ser Cys Gln Leu Glu Ile Glu		
130	135	140
Ser Val Val Asn Phe Gly Thr Leu Val Ala Asn Ser Lys Val Tyr Ser		
145	150	155
Lys Glu Ile Thr Ile Thr Asn His Gly Lys Ala Pro Gly Ile Phe Lys		
165	170	175
Ala Glu Tyr His Gly Gln Leu Pro Ile Leu Ile Phe Pro Thr Ser Gly		
180	185	190
Ile Val Asp Ala Lys Ser Ser Met Val Ile Lys Val Asp Phe Cys Ala		
195	200	205
Asp Gln Pro Arg Ile Val Asp Glu Glu Ala Ile Val Ile Leu Gln Gly		
210	215	220
Gln Pro Glu Met Leu Leu Ser Ile Lys Ala His Met Val Glu Gln Ile		
225	230	235
Ile Glu Leu Leu Ser Met Ser Ser Asp Arg Arg Leu Glu Cys Ile His		
245	250	255
Phe Gly Pro Val Phe Phe Gly Ser Ser Lys Ile Lys His Ala Arg Val		
260	265	270
Tyr Asn Asn Ser Pro Glu Pro Ile Asn Trp Val Ala Ile Ile Gln Asp		
275	280	285
Asp Ala Val Gly Glu Glu Leu Gly Thr Asp Ile Gln Gln Arg Thr Asp		
290	295	300
Ile Ala Leu Asn Asn Leu Thr Tyr Ile Arg Lys Ile Lys Asn Ile Asp		
305	310	315
Thr Thr Ile Ile Ile Ser Cys Leu Pro Asn Glu Gly Thr Leu Gln Pro		
325	330	335
Tyr Gln Lys Thr Val Ile Thr Phe Cys Phe Thr Pro Lys Leu Met Ala		
340	345	350
Val Gly Lys Lys Asp Ile Gly Pro Ser Tyr Arg Gln Asp Tyr Ala Leu		
355	360	365
Phe Leu Arg Phe Glu Ser Val Gly Ser Lys Asp Gly Phe Leu Arg Asp		
370	375	380
Asp Asp Tyr Lys Thr Ile Lys Ser Glu Arg Phe Gln Lys Val Glu Leu		
385	390	395
Ala Leu Thr Gly Thr Gly Leu Pro Val Leu Leu Gln Phe Asp Pro Gly		

405	410	415
Pro Val Leu Asn Phe Lys Pro Cys Phe Met Gly Glu Arg Ser Glu Ile		
420	425	430
Gln Cys Ile Ile Lys Asn Gln Cys Glu Leu Leu Pro Val Thr Tyr His		
435	440	445
Phe Lys Lys Thr Ala Asn Phe Glu Ile Asp Pro Glu Lys Gly Lys Ile		
450	455	460
Thr Gly Gly Gly Met Val Asp Val Met Cys Ser Phe Val Pro His Gln		
465	470	475
Leu Gly Val Phe Lys Val Lys Gln Met Ile Glu Ile Ile Gly Leu Val		
485	490	495
Ala Glu Glu Asp Leu Gln Ser Leu Ser Val Lys Ser Phe His His Val		
500	505	510
Tyr Leu Ala Phe Asn Ser Ile Cys Lys Thr Ser Thr Lys Lys Val Val		
515	520	525
Met Lys Phe Asp Pro Gly Ile Leu Pro Ser Ile Arg Asn Pro Thr Gly		
530	535	540
Lys Phe Val Val Lys Asp Leu Ala Lys Arg Lys Asn Tyr Ala Pro Val		
545	550	555
Ala Met Leu Gln Ser Ala Met Thr Arg Thr His Asn His Arg Ser Cys		
565	570	575
Glu Glu Pro Val Lys Asp Met Leu Leu Ala Phe Pro Asn Asp Arg Ala		
580	585	590
Ala Thr Ile Arg Ser Lys Asp His His Lys His Phe Arg Pro Ile Phe		
595	600	605
Thr Lys Val Pro Arg Phe Asn Tyr Val Asn His Asp Phe Ala Tyr Thr		
610	615	620
Thr Phe Glu Lys Gln Gln Lys Lys Leu His Glu Asn Tyr Tyr Ala Met		
625	630	635
Tyr Leu Lys Tyr Leu Arg Ser Val Arg Leu Gln Lys Lys Gln Ala Glu		
645	650	655
Arg Glu Arg Met Tyr Ser Tyr Asp Asp Thr Asp Ile Gly Leu Glu Pro		
660	665	670
Gly Ser Gly Leu Lys Ser Pro Ser Leu Ser Glu Ala Glu Ile Glu Glu		
675	680	685
Glu Leu Ser Ser Ala Ala Asn Ser Ile Arg Ala Asn Arg Leu Leu Thr		

690	695	700
Thr Arg Gly Ile Ala	Ser Gln Glu Glu Glu Ser Val Arg Arg Lys Val	
705	710	715
Leu Lys Gly Leu Lys	Ser Glu Pro Ser Thr Pro Gln Glu Lys His Asp	720
	725	730
Cys Ser Leu Met Leu Thr Pro Lys Gln Ile His Gln Val Ile Val Gly		735
	740	745
Pro Ser Val Leu Asn Phe Gly Asn Ile Cys Val Asn Ser Pro Asn Thr		750
	755	760
His Leu Leu His Val Ile Asn Met Leu Pro Met His Val Leu Leu Gln		765
	770	775
Leu Asp Thr Asp Leu Glu Glu Leu Gln Lys Thr Asn Gln Phe Ser Tyr		780
785	790	795
Val Ile Leu Pro Thr Ser Ser Thr Tyr Ile Ser Met Val Phe Asp Ser		800
	805	810
Pro Thr Ile Gly Lys Phe Trp Lys Ser Phe Thr Phe Thr Val Asn Asn		815
	820	825
Val Pro Ser Gly His Ile Leu Val Val Ala Val Val Gln Pro Val Thr		830
	835	840
Leu Glu Leu Ser Ser Asn Glu Leu Val Leu Arg Pro Arg Gly Phe Phe		845
	850	855
Met Lys Thr Cys Phe Arg Gly Thr Val Arg Leu Tyr Asn Arg Gln Asn		860
865	870	875
Cys Cys Ala Gln Phe Gln Trp Gln Pro Val Asn Thr Gly Arg Gly Ile		880
	885	890
Ala Phe Ser Ile Cys Pro Ser Lys Gly Thr Val Glu Ala Tyr Ser Ser		895
	900	905
Leu Glu Cys Glu Val Thr Trp Gln Gln Gly Phe Ser Ser Pro Glu Glu		910
	915	920
Gly Glu Phe Ile Leu His Val Phe Gln Gly Asn Ala Leu Lys Leu Lys		925
	930	935
Cys Val Ala His Val Ile Ile Phe Leu Glu His Gly Phe Cys Phe Glu		940
945	950	955
Gly Tyr Glu Leu Val Gly Tyr Thr Leu Val Tyr Ile Val Thr Tyr Ile		960
	965	970
		975

<210> 4194

<211> 137

<212> PRT

<213> Homo sapiens

<400> 4194

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Met Ser Thr His His Gln Asn Pro Ala Asn Gly Pro Pro Leu Pro Pro
 1             5             10             15
Ser Pro Asp Ala Glu Met Val Met Gly Ser Trp Arg Val Gly Ser Glu
      20             25             30
Met Lys Gly Thr Pro Gln Trp Ala Ala Gly Pro Ile Phe Pro Lys Pro
      35             40             45
Cys His Tyr Leu Cys Glu Gly Gly Gln Val Ala Glu Gly Ser Gly Cys
      50             55             60
Arg Leu Leu Tyr Pro Leu Cys Leu Lys His Pro Pro His Arg Ala Leu
      65             70             75             80
Val Phe Thr Arg Phe Val Leu Asp Ser Leu Asn Gly Asn Arg Ile Pro
      85             90             95
Trp Leu Arg Ala Lys Thr Thr Thr Tyr Gln Cys Pro Cys Pro Phe Gln
      100            105            110
Leu Thr Leu Ser Ser Leu Arg Ser Ser Leu Ser Leu Trp Lys Gly His
      115            120            125
Pro Ser Gln Gly Arg Asn Ala Trp Ser
      130            135

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<210> 4195

<211> 173

<212> PRT

<213> Homo sapiens

<400> 4195

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Met Lys Ser Arg Phe Val Asp Ser Gly Glu Met Ser Glu Ser Phe Pro
 1             5             10             15
Tyr Arg Thr Lys Ala Leu Phe Ala Phe Glu Glu Ile Asp Gly Val Asp

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20	25	30
Val Cys Phe Phe Gly Met His Val Gln Glu Tyr Gly Ser Asp Cys Pro		
35	40	45
Pro Pro Asn Thr Arg Tyr Val Thr Gly His Ile Trp Ala Cys Pro Pro		
50	55	60
Ser Glu Gly Asp Asp Tyr Ile Phe His Cys His Pro Pro Asp Gln Lys		
65	70	75
Ile Pro Lys Pro Lys Arg Leu Gln Glu Trp Tyr Lys Lys Met Leu Asp		
85	90	95
Lys Ala Phe Ala Glu Arg Ile Ile His Asp Tyr Lys Asp Ile Phe Lys		
100	105	110
Gln Ala Thr Glu Asp Arg Leu Thr Ser Ala Lys Glu Leu Pro Tyr Phe		
115	120	125
Glu Gly Asp Phe Trp Pro Asn Val Leu Glu Glu Ser Ile Lys Glu Leu		
130	135	140
Glu Gln Glu Glu Glu Glu Arg Lys Lys Glu Glu Ser Thr Ala Ala Ser		
145	150	155
Glu Thr Thr Glu Gly Ser Gln Gly Asp Ser Lys Asn Ala		
165	170	

<210> 4196

<211> 181

<212> PRT

<213> Homo sapiens

<400> 4196

Met Pro Leu Ala Leu Leu Gln Met Arg Pro Pro Lys Met Ser Pro Asp
1 5 10 15
Val Thr Thr Cys Pro Leu Gly Gly Lys Ser Ala Pro Val Glu Ser Thr
20 25 30
Gly Ser Phe Leu His Ser Pro Asp Leu Ala Ala Cys Thr Gly His Phe
35 40 45
Ser Glu Val Phe Gln Cys Thr Leu Cys Pro Gly Tyr Leu Gly His Ser
50 55 60
Thr Leu Ala Gln Arg Gly Trp Leu Thr Cys Leu Arg Arg Cys Phe Leu

65 70 75 80
 Gly Asp Ala Val Ala Ser Phe Leu Ser Val Leu Val Ile Phe Leu Ser
 85 90 95
 Ser Leu Pro Pro Tyr Ile Pro His Asp Arg Cys Val Tyr Val His Thr
 100 105 110
 Ser Ala Ser Leu His Ser Ala Pro Cys Gln Val Ser Cys Gln Ser Val
 115 120 125
 Pro Leu Pro Ser Gly Ser Ala Thr Ser Cys Thr Asp Ser Thr Thr Ala
 130 135 140
 His Thr Cys Val Cys Pro Ala Val Asp Pro Pro Pro Lys Ala Ala Ser
 145 150 155 160
 Ala Asp Ser Arg Glu Pro Ser Thr Leu Lys Ser Gly Gln Ala Gly Ile
 165 170 175
 Ala Thr Cys Leu Ser
 180

<210> 4197

<211> 1358

<212> PRT

<213> Homo sapiens

<400> 4197

Met Gln Asp Ser Lys Gly Arg Leu His Ala Leu Thr Ser Val Ser Arg
 1 5 10 15
 Glu Gln Ile Val Gly Gly Asp Val Gln Gly Tyr Arg Trp Met Phe Glu
 20 25 30
 Thr Gln Pro Leu Asp Gln Leu Gly Arg Ser Pro Ser Thr Ile Asp Val
 35 40 45
 Val Arg Gly Ile Thr Arg Gln Glu Val Val Ala Gly Asp Val Gly Thr
 50 55 60
 Ala Arg Trp Leu Phe Glu Thr Gln Pro Leu Glu Met Ile His Gln Arg
 65 70 75 80
 Glu Gln Gln Glu Arg Gln Lys Glu Glu Gly Lys Ser Gln Gly Asp Pro
 85 90 95
 Gln Pro Glu Ala Pro Pro Lys Gly Asp Val Gln Thr Ile Arg Trp Leu

100	105	110
Phe Glu Thr Cys Pro Met Ser Glu Leu Ala Glu Lys Gln Gly Ser Glu		
115	120	125
Val Thr Asp Pro Thr Ala Lys Ala Glu Ala Gln Ser Cys Thr Trp Met		
130	135	140
Phe Lys Pro Gln Pro Val Asp Arg Pro Val Gly Ser Arg Glu Gln His		
145	150	155
160		
Leu Gln Val Ser Gln Val Pro Ala Gly Glu Arg Gln Thr Asp Arg His		
165	170	175
Val Phe Glu Thr Glu Pro Leu Gln Ala Ser Gly Arg Pro Cys Gly Arg		
180	185	190
Arg Pro Val Arg Tyr Cys Ser Arg Val Glu Ile Pro Ser Gly Gln Val		
195	200	205
Ser Arg Gln Lys Glu Val Phe Gln Ala Leu Glu Ala Gly Lys Lys Glu		
210	215	220
Glu Gln Glu Pro Arg Val Ile Ala Gly Ser Ile Pro Ala Gly Ser Val		
225	230	235
240		
His Lys Phe Thr Trp Leu Phe Glu Asn Cys Pro Met Gly Ser Leu Ala		
245	250	255
Ala Glu Ser Ile Gln Gly Gly Asn Leu Leu Glu Glu Gln Pro Met Ser		
260	265	270
Pro Ser Gly Asn Arg Met Gln Glu Ser Gln Glu Thr Ala Ala Glu Gly		
275	280	285
Thr Leu Arg Thr Leu His Ala Thr Pro Gly Ile Leu His His Gly Gly		
290	295	300
Ile Leu Met Glu Ala Arg Gly Pro Gly Glu Leu Cys Leu Ala Lys Tyr		
305	310	315
320		
Val Leu Ser Gly Thr Gly Gln Gly His Pro Tyr Ile Arg Lys Glu Glu		
325	330	335
Leu Val Ser Gly Glu Leu Pro Arg Ile Ile Cys Gln Val Leu Arg Arg		
340	345	350
Pro Asp Val Asp Gln Gln Gly Leu Leu Val Gln Glu Asp Pro Thr Gly		
355	360	365
Gln Leu Gln Leu Lys Pro Leu Arg Leu Pro Thr Pro Gly Ser Ser Gly		
370	375	380
Asn Ile Glu Asp Met Asp Pro Glu Leu Gln Gln Leu Leu Ala Cys Gly		

385 390 395 400
 Leu Gly Thr Ser Val Ala Arg Thr Gly Leu Val Met Gln Glu Thr Glu
 405 410 415
 Gln Gly Leu Val Ala Leu Thr Ala Tyr Ser Leu Gln Pro Arg Leu Thr
 420 425 430
 Ser Lys Ala Ser Glu Arg Ser Ser Val Gln Leu Leu Ala Ser Cys Ile
 435 440 445
 Asp Lys Gly Asp Leu Ser Gly Leu His Ser Leu Arg Trp Glu Pro Pro
 450 455 460
 Ala Asp Pro Ser Pro Val Pro Ala Ser Glu Gly Ala Gln Ser Leu His
 465 470 475 480
 Pro Thr Glu Ser Ile Ile His Val Pro Pro Leu Asp Pro Ser Met Gly
 485 490 495
 Met Gly His Leu Arg Ala Ser Gly Ala Thr Pro Cys Pro Pro Gln Ala
 500 505 510
 Ile Gly Lys Ala Val Pro Leu Ala Gly Glu Ala Ala Ala Pro Ala Gln
 515 520 525
 Leu Gln Asn Thr Glu Lys Gln Glu Asp Ser His Ser Gly Gln Lys Gly
 530 535 540
 Met Ala Val Leu Gly Lys Ser Glu Gly Ala Thr Thr Thr Pro Pro Gly
 545 550 555 560
 Pro Gly Ala Pro Asp Leu Leu Ala Ala Met Gln Ser Leu Arg Met Ala
 565 570 575
 Thr Ala Glu Ala Gln Ser Leu His Gln Gln Val Leu Asn Lys His Lys
 580 585 590
 Gln Gly Pro Thr Pro Thr Ala Thr Ser Asn Pro Ile Gln Asp Gly Leu
 595 600 605
 Arg Lys Ala Gly Ala Thr Gln Ser Asn Ile Arg Pro Gly Gly Gly Ser
 610 615 620
 Asp Pro Arg Ile Pro Ala Ala Pro Arg Lys Val Ser Arg Glu Glu Gln
 625 630 635 640
 Ala Leu Pro Arg Gly Leu Pro Gly Gly Trp Val Thr Ile Gln Asp Gly
 645 650 655
 Ile Tyr Thr Ala His Pro Val Arg Thr Phe Asp Pro Pro Gly Gly Val
 660 665 670
 Gln Leu Ser Gln Arg Glu Pro Gln Ser Arg His Arg Glu Thr Ala Leu

675	680	685
Ser Val Gln Ala Pro Arg	Pro Leu Gln Gly Gly	Pro Gly Gln Ser Thr
690	695	700
Gly Pro Gly Arg Glu Glu	Pro Gly Gly Cys Thr	Gln Met Ala Trp Gly
705	710	715
Pro Pro Gly Lys Ala Met	Ala Glu Val Cys Pro	Gly Gly Leu Gln Ala
725	730	735
Ala Glu Thr Thr Leu Lys	Thr Ala Pro Leu Gly	Arg His Ile Leu Ala
740	745	750
Ser Gly Pro Gln Ala Ala	Gly Ala Ser Pro His	Pro His Asn Ala Phe
755	760	765
Val Pro Pro Pro Pro Thr	Leu Pro Ala Ala Val	Thr Gly Pro Asp Phe
770	775	780
Pro Ala Gly Ala His Arg	Ala Glu Asp Ser Ile	Gln Gln Ala Ser Glu
785	790	795
Pro Leu Lys Asp Pro Leu	Leu His Ser His Ser	Ser Pro Ala Gly Gln
805	810	815
Arg Thr Pro Gly Gly Ser	Gln Thr Lys Thr Pro	Lys Leu Asp Pro Thr
820	825	830
Met Pro Pro Lys Lys Lys	Pro Gln Leu Pro Pro	Lys Pro Ala His Leu
835	840	845
Thr Gln Ser His Pro Pro	Gln Arg Leu Pro Lys	Pro Leu Pro Leu Ser
850	855	860
Pro Ser Phe Ser Ser Glu	Val Gly Gln Arg Glu	His Gln Arg Gly Glu
865	870	875
Arg Asp Thr Ala Ile Pro	Gln Pro Ala Lys Val	Pro Thr Thr Val Asp
885	890	895
Gln Gly His Ile Pro Leu	Ala Arg Cys Pro Ser	Gly His Ser Gln Pro
900	905	910
Ser Leu Gln His Gly Leu	Ser Thr Thr Ala Pro	Arg Pro Thr Lys Asn
915	920	925
Gln Ala Thr Gly Ser Asn	Ala Gln Ser Ser Glu	Pro Pro Lys Leu Asn
930	935	940
Ala Leu Asn His Asp Pro	Thr Ser Pro Gln Trp	Gly Pro Gly Pro Ser
945	950	955
Gly Glu Gln Pro Met Glu	Gly Ser His Gln Gly	Ala Pro Glu Ser Pro

965	970	975
Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu Leu Asn Gln		
980	985	990
Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp Val Gln Ala		
995	1000	1005
Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly Ala Ala Pro		
1010	1015	1020
Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val Glu Gln Ala		
1025	1030	1035
Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln Leu Lys Glu		
1045	1050	1055
Gln Thr Leu Ala Arg Leu Leu Asp Ile Glu Glu Ala Val His Lys Ala		
1060	1065	1070
Leu Ser Ser Met Ser Ser Leu Gln Pro Glu Ala Ser Ala Arg Gly His		
1075	1080	1085
Phe Gln Gly Pro Pro Lys Asp His Ser Ala His Lys Ile Ser Val Thr		
1090	1095	1100
Val Ser Ser Ser Ala Arg Pro Ser Gly Ser Gly Gln Glu Val Gly Gly		
1105	1110	1115
Gln Thr Ala Val Lys Asn Gln Ala Lys Val Glu Cys His Thr Glu Ala		
1125	1130	1135
Gln Ser Gln Val Lys Ile Arg Asn His Thr Glu Ala Arg Gly His Thr		
1140	1145	1150
Ala Ser Thr Ala Pro Ser Thr Arg Arg Gln Glu Thr Ser Arg Glu Tyr		
1155	1160	1165
Leu Cys Pro Pro Arg Val Leu Pro Ser Ser Arg Asp Ser Pro Ser Ser		
1170	1175	1180
Pro Thr Phe Ile Ser Ile Gln Ser Ala Thr Arg Lys Pro Leu Glu Thr		
1185	1190	1195
Pro Ser Phe Lys Gly Asn Pro Asp Val Ser Val Lys Ser Thr Gln Leu		
1205	1210	1215
Ala Gln Asp Ile Gly Gln Ala Leu Leu His Gln Lys Gly Val Gln Asp		
1220	1225	1230
Lys Thr Gly Lys Lys Asp Ile Thr Gln Cys Ser Val Gln Pro Glu Pro		
1235	1240	1245
Ala Pro Pro Ser Ala Ser Pro Leu Pro Arg Gly Trp Gln Lys Ser Val		

1250 1255 1260
 Leu Glu Leu Gln Thr Gly Pro Gly Ser Ser Gln His Tyr Gly Ala Met
 1265 1270 1275 1280

 Arg Thr Val Thr Glu Gln Tyr Glu Glu Val Asp Gln Phe Gly Asn Thr
 1285 1290 1295
 Val Leu Met Ser Ser Thr Thr Val Thr Glu Gln Ala Glu Pro Pro Arg
 1300 1305 1310
 Asn Pro Gly Ser His Leu Gly Leu His Ala Ser Pro Leu Leu Arg Gln
 1315 1320 1325
 Phe Leu His Ser Pro Ala Gly Phe Ser Ser Asp Leu Thr Glu Ala Glu
 1330 1335 1340
 Thr Val Gln Val Ser Cys Ser Tyr Ser Gln Pro Ala Ala Gln
 1345 1350 1355

<210> 4198

<211> 331

<212> PRT

<213> Homo sapiens

<400> 4198

Met Ala Glu Gly Gly Gly Pro Glu Pro Gly Glu Gln Glu Arg Arg Ser
 1 5 10 15
 Ser Gly Pro Arg Pro Pro Ser Ala Arg Asp Leu Gln Leu Ala Leu Ala
 20 25 30
 Glu Leu Tyr Glu Asp Glu Val Lys Cys Lys Ser Ser Lys Ser Asn Arg
 35 40 45
 Pro Lys Ala Thr Val Phe Lys Ser Pro Arg Thr Pro Pro Gln Arg Phe
 50 55 60
 Tyr Ser Ser Glu His Glu Tyr Ser Gly Leu Asn Ile Val Arg Pro Ser
 65 70 75 80
 Thr Gly Lys Ile Val Asn Glu Leu Phe Lys Glu Ala Arg Glu His Gly
 85 90 95
 Ala Val Pro Leu Asn Glu Ala Thr Arg Ala Ser Gly Asp Asp Lys Ser
 100 105 110

Lys Ser Phe Thr Gly Gly Gly Tyr Arg Leu Gly Ser Ser Phe Cys Lys
 115 120 125
 Arg Ser Glu Tyr Ile Tyr Gly Glu Asn Gln Leu Gln Asp Val Gln Ile
 130 135 140
 Leu Leu Lys Leu Trp Ser Asn Gly Phe Ser Leu Asp Asp Gly Glu Leu
 145 150 155 160
 Arg Pro Tyr Asn Glu Pro Thr Asn Ala Gln Phe Leu Glu Ser Val Lys
 165 170 175
 Arg Gly Glu Ile Pro Leu Glu Leu Gln Arg Leu Val His Gly Gly Gln
 180 185 190
 Val Asn Leu Asp Met Glu Asp His Gln Asp Gln Glu Tyr Ile Lys Pro
 195 200 205
 Arg Leu Arg Phe Lys Ala Phe Ser Gly Glu Gly Gln Lys Leu Gly Ser
 210 215 220
 Leu Thr Pro Glu Ile Val Ser Thr Pro Ser Ser Pro Glu Glu Glu Asp
 225 230 235 240
 Lys Ser Ile Leu Asn Ala Val Val Leu Ile Asp Asp Ser Val Pro Thr
 245 250 255
 Thr Lys Ile Gln Ile Arg Leu Ala Asp Gly Ser Arg Leu Ile Gln Arg
 260 265 270
 Phe Asn Ser Thr His Arg Ile Leu Asp Val Arg Asn Phe Ile Val Gln
 275 280 285
 Ser Arg Pro Glu Phe Ala Ala Leu Asp Phe Ile Leu Val Thr Ser Phe
 290 295 300
 Pro Asn Lys Glu Leu Thr Asp Glu Ser Leu Thr Leu Leu Glu Ala Asp
 305 310 315 320
 Ile Leu Asn Thr Val Leu Leu Gln Gln Leu Lys
 325 330

<210> 4199

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4199

Met Thr Phe Ser Leu Ala Arg Ile Lys Arg Gly Gly Cys Phe Leu Ala
 1 5 10 15
 Gly Phe Arg Asn Leu Phe Lys Trp Phe His Cys Pro Phe Ile His Pro
 20 25 30
 Ser Thr His Pro Thr Ile Gln Pro Ala Ile His Pro Leu Phe Ile Gln
 35 40 45
 Gln Thr Phe Ser Cys Thr Arg Glu Leu Lys Gly Glu Gly Ser Gly Pro
 50 55 60
 Trp Ala Pro Pro Ala Cys Arg Glu Thr Pro Leu Cys Gly Arg Arg Gly
 65 70 75 80
 Gly Leu Cys Pro Leu Tyr Pro Pro Ser Val Pro Val Val Phe Arg Pro
 85 90 95
 Val Thr Cys Leu Asn Leu Ser Val Cys Leu
 100 105

<210> 4200

<211> 527

<212> PRT

<213> Homo sapiens

<400> 4200

Met Val Tyr Ile Val Arg Gln Phe Leu Leu Tyr Asn Val Ser Gly Ser
 1 5 10 15
 Val Tyr Leu Asp Gln Leu Ile Val Leu Leu Thr Ala Lys Phe Ser Ile
 20 25 30
 Leu Arg Ile Ala Gly Ser Arg Val His His Ser Pro Phe Ser Gly His
 35 40 45
 Leu Asp Gly Cys Ser Phe Leu Ser Leu Gln His Ser Leu His Thr Ser
 50 55 60
 Leu Asp Met Ser Arg His Glu Asn Val Phe Leu Gly Leu Thr Leu Ser
 65 70 75 80
 Ser Lys Ser Ala Gly Leu Lys Gly Phe Gln Leu Ala Phe Val Pro Gly
 85 90 95
 Leu Leu Gln Gly Thr Gly Gly Tyr Leu Asp Gly Pro Leu Pro Thr Pro
 100 105 110

Val Asp Asn Pro Arg Val Gly Leu Glu Val Gly Leu Arg Leu Ser Leu
 115 120 125
 Pro Pro Leu Pro Pro Cys Pro Gly Val His Ile Gln Ser Ser Gln Thr
 130 135 140
 Val Glu Ser Ser Gly Leu Tyr Thr Leu Gln Ser Ile Leu Lys Ala Gln
 145 150 155 160
 Leu Val Lys Glu Asp Lys Asp Ala Gln Phe Tyr Cys Glu Leu Asn Tyr
 165 170 175
 Arg Leu Pro Ser Gly Asn His Met Lys Glu Ser Arg Glu Val Thr Val
 180 185 190
 Pro Val Phe Tyr Pro Thr Glu Lys Val Trp Leu Glu Val Glu Pro Val
 195 200 205
 Gly Met Leu Lys Glu Gly Asp Arg Val Glu Ile Arg Cys Leu Ala Asp
 210 215 220
 Gly Asn Pro Pro Pro His Phe Ser Ile Ser Lys Gln Asn Pro Ser Thr
 225 230 235 240
 Arg Glu Ala Glu Glu Glu Thr Thr Asn Asp Asn Gly Val Leu Val Leu
 245 250 255
 Glu Pro Ala Arg Lys Glu His Ser Gly Arg Tyr Glu Cys Gln Gly Leu
 260 265 270
 Asp Leu Asp Thr Met Ile Ser Leu Leu Ser Glu Pro Gln Glu Leu Leu
 275 280 285
 Val Asn Tyr Val Ser Asp Val Arg Val Ser Pro Ala Ala Pro Glu Arg
 290 295 300
 Gln Glu Gly Ser Ser Leu Thr Leu Thr Cys Glu Ala Glu Ser Ser Gln
 305 310 315 320
 Asp Leu Glu Phe Gln Trp Leu Arg Glu Glu Thr Gly Gln Val Leu Glu
 325 330 335
 Arg Gly Pro Val Leu Gln Leu His Asp Leu Lys Arg Glu Ala Gly Gly
 340 345 350
 Gly Tyr Arg Cys Val Ala Ser Val Pro Ser Ile Pro Gly Leu Asn Arg
 355 360 365
 Thr Gln Leu Val Asn Val Ala Ile Phe Gly Pro Pro Trp Met Ala Phe
 370 375 380
 Lys Glu Arg Lys Val Trp Val Lys Glu Asn Met Val Leu Asn Leu Ser
 385 390 395 400

Cys Glu Ala Ser Gly His Pro Arg Pro Thr Ile Ser Trp Asn Val Asn
 405 410 415
 Gly Thr Ala Ser Glu Gln Asp Gln Asp Pro Gln Arg Val Leu Ser Thr
 420 425 430
 Leu Asn Val Leu Val Thr Pro Glu Leu Leu Glu Thr Gly Val Glu Cys
 435 440 445
 Thr Ala Ser Asn Asp Leu Gly Lys Asn Thr Ser Ile Leu Phe Leu Glu
 450 455 460
 Leu Val Asn Leu Thr Thr Leu Thr Pro Asp Ser Asn Thr Thr Thr Gly
 465 470 475 480
 Leu Ser Thr Ser Thr Ala Ser Pro His Thr Arg Ala Asn Ser Thr Ser
 485 490 495
 Thr Gly Lys Pro Gly Leu Ala Arg Glu Gln Gly Cys Ala Arg Ala Ser
 500 505 510
 Phe Leu Pro Cys Pro Ser Pro Glu Ser Pro Val Gln Lys Gly Glu
 515 520 525

<210> 4201

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4201

Met Thr Thr Pro Pro Thr Ser Leu Pro Glu Pro Phe Ser Gly Asp Pro
 1 5 10 15
 Gly Arg Leu Ala Gly Phe Leu Met Gln Met Asp Arg Phe Met Ile Phe
 20 25 30
 Gln Ala Ser Arg Phe Pro Gly Glu Ala Glu Arg Val Ala Phe Leu Val
 35 40 45
 Ser Arg Leu Thr Gly Glu Ala Glu Lys Trp Ala Ile Pro His Met Gln
 50 55 60
 Pro Asp Ser Pro Leu Arg Asn Asn Tyr Gln Gly Phe Leu Ala Glu Leu
 65 70 75 80
 Arg Arg Thr Tyr Lys Ser Pro Leu Arg His Ala Arg Arg Ala Gln Ile
 85 90 95

Arg Lys Thr Ser Ala Ser Asn Arg Ala Val Arg Glu Arg Gln Met Leu
 100 105 110
 Cys Arg Gln Leu Ala Ser Ala Gly Thr Gly Pro Cys Pro Val His Pro
 115 120 125
 Ala Ser Asn Gly Thr Ser Pro Ala Pro Ala Leu Pro Ala Arg Ala Arg
 130 135 140
 Asn Leu
 145

<210> 4202

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4202

Met Ile Pro Trp Arg Arg Arg Gly Val Leu Val Phe Gly Ile Phe Ser
 1 5 10 15
 Leu Leu Val Leu Val Phe Pro His Leu Pro Gly Phe Ile Cys Leu Trp
 20 25 30
 Ser Leu Met Leu Val Thr Phe Gly Trp Gly Phe Cys Val Asp Ile Val
 35 40 45
 Phe Val Asp Val Asp Ala Ile Pro Phe Cys Phe Leu Val Phe Leu Leu
 50 55 60
 Thr Gly Arg Leu Leu Ser Cys Arg Pro Ala Gly Val Cys Trp Arg Ser
 65 70 75 80
 Thr Pro Asp Pro Val Cys Leu Ser Ile Thr Ser Arg His Cys Arg Thr
 85 90 95
 Ala Lys Ile Ala Ala Cys Ser Phe Leu Trp Lys Phe Arg Pro Arg Gly
 100 105 110
 Ala Pro Ala Arg Cys
 115

<210> 4203

<211> 369

<212> PRT

<213> Homo sapiens

<400> 4203

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Met Ile Gln Gly Arg Leu Phe Asn Met Leu Ser Ala Val Arg Glu Met
  1             5             10             15
Asp Lys Glu Ser Ile Leu Arg Lys Ile Gly Gln Ala Lys Gln Ser Ile
      20             25             30
Ala Gln Glu Ala Asn Phe Phe Lys Phe Phe Leu Arg Arg Ile Ser Gln
      35             40             45
Asp Asp Tyr Thr Ser Arg Phe Ser Val Ser Pro Lys Glu Val Leu Pro
      50             55             60
Phe Ala Phe Pro Asp Cys Ser Pro Pro Gln Asp Ser Asn Glu Leu Ala
      65             70             75             80
Pro Asp Gly Leu Gly Leu Val Pro Ile Lys Ser Ser Glu Val Gln Ile
      85             90             95
Lys Gln Ser Tyr Ser Phe Phe Asn Leu Gln Val Pro Gln Leu Tyr Lys
      100            105            110
Ile Lys Arg Tyr Gln Pro Phe Ser Val His Lys Ser Ser Thr Ser Tyr
      115            120            125
Arg Pro Gln Lys Leu Ala Arg Ala Leu Lys Gln Gly Ala Glu Asp Glu
      130            135            140
Val Thr Thr Ile Thr Ala Leu Pro Lys Gln Asp Ser Thr Thr Gln Leu
      145            150            155            160
Ser Gly Lys Thr Ser Ile Leu Ser Met Lys Pro Pro Glu Ala Leu Ala
      165            170            175
Met Ser Leu Asp Tyr Asp Pro Leu Tyr Val Phe Asn Pro Asn Pro Gly
      180            185            190
Leu Phe Ala Val Met His Pro Leu Thr Tyr Ala Glu Thr Leu Ile Asp
      195            200            205
Tyr His Leu Cys Ser His Pro Lys Tyr Lys Phe Thr Lys Glu Ser Arg
      210            215            220
His Gly Ser Ser Ile Pro Val Thr Gln Lys Gln Phe Leu His His Thr
      225            230            235            240
Asp Ile Ile Pro Gly Ile Met His Trp Lys Ser Phe Gln Ser Leu Val
      245            250            255

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Leu Ser Ser Leu Pro Asp Pro Ser Lys Met Glu Thr Thr Lys Ser Cys
 260 265 270
 Asp Ser Phe Asn Ser Phe Met Leu Pro Ile Asp Val Pro Ala Ile Leu
 275 280 285
 Asp Ala Leu Pro Glu Glu Asp Arg Leu Glu Thr Val Glu Arg Glu Leu
 290 295 300
 Cys Glu Gln Asn Val Glu Val Met Leu Thr Pro Glu Met Ile Lys Val
 305 310 315 320
 Glu Phe Pro Met Leu Asn Tyr Lys Asp Ile Arg Lys Glu Lys Glu Val
 325 330 335
 Lys Asp Gln Ala Gln Pro Ala Glu Lys Ala Gly Glu Lys Leu Leu Glu
 340 345 350
 Glu Met Arg Asn Leu Arg Gly Lys Ala Leu Asn Thr Tyr Leu Ile Leu
 355 360 365
 Glu

<210> 4204

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4204

Met Pro Lys Ile Ile Leu Cys Pro Asn His Lys Phe Ser Gly Leu Pro
 1 5 10 15
 Arg Asn His Leu Val Cys Ile Glu Cys Phe Ser Lys Cys Arg Asp Ala
 20 25 30
 Gln Val Val Gly Ile Gln Tyr Ile Glu Leu Ser Arg Cys Thr Phe Leu
 35 40 45
 Glu Tyr Asn Leu Asn Gly His Phe Pro Thr Cys Ala Ile Pro Leu Phe
 50 55 60
 Ser Pro His Ser Ile His Ile Ser Gln Thr Thr Leu Ile Ile Val Phe
 65 70 75 80
 Ile Ile Asp Leu Arg Lys Lys Lys Phe Glu Arg Val Glu Lys Thr Cys
 85 90 95

Ile Leu Ser Pro Trp Ile Val Asn His

100

105

<210> 4205

<211> 610

<212> PRT

<213> Homo sapiens

<400> 4205

Met Ala Glu Leu Ser Glu Pro Glu Gly Pro Val Asp Trp Lys Glu Arg

1

5

10

15

Cys Val Ala Leu Glu Ser Gln Leu Met Lys Phe Arg Val Gln Ala Ser

20

25

30

Lys Ile Arg Glu Leu Leu Ala Glu Lys Met Gln Gln Leu Glu Arg Gln

35

40

45

Val Ile Asp Ala Glu Arg Gln Ala Glu Lys Ala Phe Gln Gln Val Gln

50

55

60

Val Met Glu Asp Lys Leu Lys Ala Ala Asn Ile Gln Thr Ser Glu Ser

65

70

75

80

Glu Thr Arg Leu Tyr Asn Lys Cys Gln Asp Leu Glu Ser Leu Ile Gln

85

90

95

Glu Lys Asp Asp Val Ile Gln Asn Leu Glu Leu Gln Leu Glu Glu Gln

100

105

110

Lys Gln Ile Arg Ile Gln Glu Ala Lys Ile Ile Glu Glu Lys Ala Ala

115

120

125

Lys Ile Lys Glu Trp Val Thr Val Lys Leu Asn Glu Leu Glu Leu Glu

130

135

140

Asn Gln Asn Leu Arg Leu Ile Asn Gln Asn Gln Thr Glu Glu Ile Arg

145

150

155

160

Thr Met Gln Ser Lys Leu Gln Val Gln Gly Lys Lys Ser Ser Thr Val

165

170

175

Ser Thr Leu Lys Leu Ser Glu Gly Gln Arg Leu Ser Ser Leu Thr Phe

180

185

190

Gly Cys Phe Leu Ser Arg Ala Arg Ser Pro Pro Gln Val Val Lys Ser

195

200

205

Glu Glu Met Ser Lys Ile Ser Ser Lys Glu Pro Glu Phe Thr Glu Gly
 210 215 220
 Lys Asp Met Glu Glu Met Glu Ile Pro Glu Lys Ser Val Asp Asn Gln
 225 230 235 240
 Val Leu Glu Asn Asn Arg Gly Gln Arg Thr Leu His Gln Thr Pro Cys
 245 250 255
 Gly Ser Glu Gln Asn Arg Lys Thr Arg Thr Ser Phe Ala Thr Asp Gly
 260 265 270
 Gly Ile Ser Gln Asn Ser Gly Ala Pro Val Ser Asp Trp Ser Ser Asp
 275 280 285
 Glu Glu Asp Gly Ser Arg Gly Arg Ser Lys Ser Arg Cys Thr Ser Thr
 290 295 300
 Leu Ser Ser His Thr Ser Glu Glu Gly Val Gln Cys Ser Arg Met Gly
 305 310 315 320
 Ser Glu Met Tyr Leu Thr Ala Ser Asp Asp Ser Ser Ser Ile Phe Glu
 325 330 335
 Glu Glu Thr Phe Gly Ile Lys Arg Pro Glu His Lys Lys Leu Tyr Ser
 340 345 350
 Trp Gln Gln Glu Ala Gln Trp Lys Ala Leu Asn Ser Pro Leu Gly Lys
 355 360 365
 Gly Asn Ser Glu Leu Ser Lys Lys Glu Gln Asp Ser Ser Ser Asp Glu
 370 375 380
 Leu Asn Lys Lys Phe Gln Ser Gln Arg Leu Asp Tyr Ser Ser Ser Ser
 385 390 395 400
 Ser Glu Ala Asn Thr Pro Ser Pro Ile Leu Thr Pro Ala Leu Met Pro
 405 410 415
 Lys His Pro Asn Ser Leu Ser Gly Lys Gly Thr Gln Leu Val Pro Ser
 420 425 430
 Ser His Leu Pro Pro Pro Lys Leu Arg Ile Pro Asn Val Phe Ser Ile
 435 440 445
 Ser Val Ala Leu Ala Lys Arg His Leu Ser Gln Pro Gln Leu Ser Ser
 450 455 460
 Asp Arg Met Phe Gly Thr Asn Arg Asn Ala Ile Ser Met Ile Arg Pro
 465 470 475 480
 Leu Arg Pro Gln Glu Thr Asp Leu Asp Leu Val Asp Gly Asp Ser Thr
 485 490 495

Glu Val Leu Glu Asn Met Asp Thr Ser Cys Asp Asp Gly Leu Phe Ser
 500 505 510
 Tyr Asp Ser Leu Asp Ser Pro Asn Ser Asp Asp Gln Glu His Cys Asp
 515 520 525
 Pro Ala Lys Lys Val Ala Tyr Ser Lys Pro Pro Thr Pro Pro Leu His
 530 535 540
 Arg Phe Pro Ser Trp Glu Ser Arg Ile Tyr Ala Val Ala Lys Ser Gly
 545 550 555 560
 Ile Arg Met Ser Glu Ala Phe Asn Met Glu Ser Val Asn Lys Asn Ser
 565 570 575
 Ala Ala Thr Leu Ser Tyr Thr Thr Ser Gly Leu Tyr Thr Ser Leu Ile
 580 585 590
 Tyr Lys Asn Met Thr Thr Pro Val Tyr Thr Thr Leu Arg Gly Arg Arg
 595 600 605
 Pro Lys
 610

<210> 4206

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4206

Met Gly Gly Leu Leu Thr Pro Gly Leu Trp Cys Cys Arg Gln Pro Ser
 1 5 10 15
 Pro Val Tyr Thr Ala Thr Gln Pro Gln Ala Val Gly Ser Gln Trp Pro
 20 25 30
 Gly Gly Lys Gln Leu His Ser Pro Ala Leu Pro Gly Cys Pro Phe Gly
 35 40 45
 Phe Gln Pro Gly Ser Arg Pro Ala Ser Thr Gly Lys Pro Val Thr Glu
 50 55 60
 Ala Trp Thr Gln Arg Trp Thr Arg His Leu Leu Ala Thr Cys Asp Leu
 65 70 75 80
 Gly Arg Ser Glu Ser Val Ala Arg Ser Thr Cys Ser Ala Ala Ala Ile
 85 90 95

Asn Ser Leu Pro Val Ser Lys Arg Arg

100

105

<210> 4207

<211> 466

<212> PRT

<213> Homo sapiens

<400> 4207

Met Ala Leu Ala Gly Thr Gln Val Gly Pro Pro Pro Gln Glu Arg Ala
 1 5 10 15
 Pro Glu Pro Ile Gly Arg Ala Trp Gly Pro Pro Gly Ile Thr Gln Pro
 20 25 30
 Ser Ala Pro Gly Ala Thr Val Gly Arg Arg Val Ser Val Ala Ala Gly
 35 40 45
 Pro Trp Leu His Gly Pro His Gly Ser Cys Glu Trp Val Arg Leu Pro
 50 55 60
 Gly Ser Gly Asp Arg Gln Arg Thr Asp Pro Arg Leu Gly Ser Trp Arg
 65 70 75 80
 Glu Gly Arg Arg Gly Ala Gly Gln Pro Gly Ser Asp Thr Val Ser Ser
 85 90 95
 Ser Gly Arg Arg Arg Pro Ala Gly Ser Thr Gln Ala Gly Arg Gly Trp
 100 105 110
 Ala Ser Leu Glu Pro Ala Thr Ala Leu Val Gly Thr Trp Arg Arg Ala
 115 120 125
 His Val Ser Pro His Ala Ser His Arg Gly Ala Leu Ala Arg Arg Pro
 130 135 140
 Ala Arg Gly Ala Cys Ala Trp Asp Gly Ser Gln Asn Gln Arg Ala Pro
 145 150 155 160
 Val Arg Leu Ala Ser Thr Val Gly Leu Trp Glu Ser Leu Leu Phe Ile
 165 170 175
 Phe Lys His Leu Gly Phe Ser Thr Gly Ser Trp Leu Leu Phe Pro Gln
 180 185 190
 Gly Met Ser Leu Arg Ser Arg Thr Arg Trp Gly Ser Gln Glu Ala Ala
 195 200 205

Ala Gln Ser Leu His Ala Gly Lys Gly Ser His Leu Ser Gly Val Gly
 210 215 220
 Ser Leu Val Val Gln Gly Ser Ala Gly Gln Ser Leu Gly Cys Ala Ile
 225 230 235 240
 Thr Ala Thr Ala Phe Leu Leu Gly Ala Ser Thr Ser Ser Lys Thr Gly
 245 250 255
 Leu Val Pro Ala Pro Pro Ala Ala Ser Gly Gln Gly His Glu Gly Arg
 260 265 270
 Ala Leu Ser Thr Trp Ala Gly Gly Thr Leu Pro Gly Gly Thr Glu Gly
 275 280 285
 Ala Pro Thr Trp Ala Pro Ala Ser Cys Pro Ser Leu Leu Pro Pro Arg
 290 295 300
 Ala Arg Trp Gly Pro Gly Phe Glu Glu Pro Arg Thr Arg Ala Leu Pro
 305 310 315 320
 Ala Gly Ser Trp Arg Arg Ala Ser Gly Leu Gly Asn Arg Gly Arg Lys
 325 330 335
 Asn Ser Ser Arg Pro Gly Thr Lys Gly Ala Ser Gly Arg Thr His Gly
 340 345 350
 Trp Pro Arg Ala Arg Gly Val Thr Ala Gly Arg Pro Pro Gly Pro Gly
 355 360 365
 Pro Val Arg Gly Gln Tyr Gly Asp Pro Ala Cys Arg Trp Gln Ser Val
 370 375 380
 Leu Cys Val Trp Gly Pro Gln His Arg Leu Gly Gly Gly Trp Gly Arg
 385 390 395 400
 Gly Ser Arg Ser Gly Gln Gly Leu Gly Gly Ser Gly Thr Gly Arg Gly
 405 410 415
 Glu Gln Thr Gly Ser Ser Ser Gly His His Pro Gly Thr Ala Ala Pro
 420 425 430
 Thr Arg Ala Ala Pro His Pro Trp Pro Arg Ser Pro Gly Thr Ala Gly
 435 440 445
 Pro Gly Val Ser Glu Gly Leu Ser Arg Ala Gly Thr Asp Gln Trp Ser
 450 455 460
 Pro Gly
 465

<210> 4208

<211> 612

<212> PRT

<213> Homo sapiens

<400> 4208

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Met Leu Leu Phe Arg Asp Cys Glu Glu Ala Thr Asp Phe Leu Thr Cys
  1             5             10             15
His Gly Leu Thr Val Ser Asp Gly Cys Val Glu Leu Asn Arg Ser Ala
      20             25             30
Phe Leu Glu Pro Glu Gly Leu Ser Lys Thr Arg Lys Ser Val Phe Ile
      35             40             45
Thr Arg Lys Leu Thr Val Ser Val Gly Glu Ile Val Asn Gly Gly Pro
      50             55             60
Leu Pro Pro Val Pro Arg His Thr Pro Val Cys Ser Phe Asn Ser Gln
      65             70             75             80
Asn Lys Tyr Ile Gly Glu Ser Leu Ala Ala Glu Leu Pro Val Ser Thr
      85             90             95
Gln Arg Pro Gly Ser Asp Thr Val Gly Gly Gly Arg Gly Glu Glu Cys
      100            105            110
Gly Val Glu Pro Asp Ala Pro Leu Ser Ser Leu Pro Gln Ser Leu Pro
      115            120            125
Ala Pro Ala Pro Ser Pro Val Pro Leu Pro Pro Val Leu Ala Leu Thr
      130            135            140
Pro Ser Val Ala Pro Ser Leu Phe Gln Leu Ser Val Gln Pro Glu Pro
      145            150            155            160
Pro Pro Pro Glu Pro Val Pro Met Tyr Ser Asp Glu Asp Leu Ala Gln
      165            170            175
Val Val Asp Glu Leu Ile Gln Glu Ala Leu Gln Arg Asp Cys Glu Glu
      180            185            190
Val Gly Ser Ala Gly Ala Ala Tyr Ala Ala Ala Ala Leu Gly Val Ser
      195            200            205
Asn Ala Ala Met Glu Asp Leu Leu Thr Ala Ala Thr Thr Gly Ile Leu
      210            215            220
Arg His Ile Ala Ala Glu Glu Val Ser Lys Glu Arg Glu Arg Arg Glu
      225            230            235            240

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Gln Glu Arg Gln Arg Ala Glu Glu Glu Arg Leu Lys Gln Glu Arg Glu
 245 250 255
 Leu Val Leu Ser Glu Leu Ser Gln Gly Leu Ala Val Glu Leu Met Glu
 260 265 270
 Arg Val Met Met Glu Phe Val Arg Glu Thr Cys Ser Gln Glu Leu Lys
 275 280 285
 Asn Ala Val Glu Thr Asp Gln Arg Val Arg Val Ala Arg Cys Cys Glu
 290 295 300
 Asp Val Cys Ala His Leu Val Asp Leu Phe Leu Val Glu Glu Ile Phe
 305 310 315 320
 Gln Thr Ala Lys Glu Thr Leu Gln Glu Leu Gln Cys Phe Cys Lys Tyr
 325 330 335
 Leu Gln Arg Trp Arg Glu Ala Val Thr Ala Arg Lys Lys Leu Arg Arg
 340 345 350
 Gln Met Arg Ala Phe Pro Ala Ala Pro Cys Cys Val Asp Val Ser Asp
 355 360 365
 Arg Leu Arg Ala Leu Ala Pro Ser Ala Glu Cys Pro Ile Ala Glu Glu
 370 375 380
 Asn Leu Ala Arg Gly Leu Leu Asp Leu Gly His Ala Gly Arg Leu Gly
 385 390 395 400
 Ile Ser Cys Thr Arg Leu Arg Arg Leu Arg Asn Lys Thr Ala His Gln
 405 410 415
 Met Lys Val Gln His Phe Tyr Gln Gln Leu Leu Ser Asp Val Ala Trp
 420 425 430
 Ala Ser Leu Asp Leu Pro Ser Leu Val Ala Glu His Leu Pro Gly Arg
 435 440 445
 Gln Glu His Val Phe Trp Lys Leu Val Leu Val Leu Pro Asp Val Glu
 450 455 460
 Glu Gln Ser Pro Glu Ser Cys Gly Arg Ile Leu Ala Asn Trp Leu Lys
 465 470 475 480
 Val Lys Phe Met Gly Asp Glu Gly Ser Val Asp Asp Thr Ser Ser Asp
 485 490 495
 Ala Gly Gly Ile Gln Thr Leu Ser Leu Phe Asn Ser Leu Ser Ser Lys
 500 505 510
 Gly Asp Gln Met Ile Ser Val Asn Val Cys Ile Lys Val Ala His Gly
 515 520 525

Ala Leu Ser Asp Gly Ala Ile Asp Ala Val Glu Thr Gln Lys Asp Leu
530 535 540
Leu Gly Ala Ser Gly Leu Met Leu Leu Leu Pro Pro Lys Met Lys Ser
545 550 555 560
Glu Asp Met Ala Glu Glu Asp Val Tyr Trp Leu Ser Ala Leu Leu Gln
565 570 575
Leu Lys Gln Leu Leu Gln Ala Lys Pro Phe Gln Pro Ala Leu Pro Leu
580 585 590
Val Val Leu Val Pro Ser Pro Gly Gly Asp Ala Val Glu Lys Glu Val
595 600 605
Glu Asp Gly Leu
610

<210> 4209

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4209

Met Ala Ser Met Gly Leu Gln Val Met Gly Ile Ala Leu Ala Val Leu
1 5 10 15
Gly Trp Leu Ala Val Met Leu Cys Cys Ala Leu Pro Met Trp Arg Val
20 25 30
Thr Ala Phe Ile Gly Ser Asn Ile Val Thr Ser Gln Thr Ile Trp Glu
35 40 45
Gly Leu Trp Met Asn Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
50 55 60
Lys Val Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
65 70 75 80
Arg Ala Leu Val Ile Ile Ser Ile Ile Val Ala Ala Leu Gly Val Leu
85 90 95
Leu Ser Val Val Gly Gly Lys Cys Thr Asn Cys Leu Glu Asp Glu Ser
100 105 110
Ala Lys Ala Lys Thr Met Ile Val Ala Gly Val Val Phe Leu Leu Ala
115 120 125

Gly Leu Met Val Ile Val Pro Val Ser Trp Thr Ala His Asn Ile Ile
 130 135 140
 Gln Asp Phe Tyr Asn Pro Leu Val Ala Ser Gly Gln Lys Arg Glu Met
 145 150 155 160
 Gly Ala Ser Leu Tyr Val Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
 165 170 175
 Gly Gly Gly Leu Leu Cys Cys Asn Cys Pro Pro Arg Thr Asp Lys Pro
 180 185 190
 Tyr Ser Ala Lys Tyr Ser Ala Ala Arg Ser Ala Ala Ala Ser Asn Tyr
 195 200 205
 Val

<210> 4210

<211> 211

<212> PRT

<213> Homo sapiens

<400> 4210

Met Ser Cys Thr Ile Glu Lys Ile Leu Thr Asp Ala Lys Thr Leu Leu
 1 5 10 15
 Glu Arg Leu Arg Glu His Asp Ala Ala Ala Glu Ser Leu Val Asp Gln
 20 25 30
 Ser Ala Ala Leu His Arg Arg Val Ala Ala Met Arg Glu Ala Gly Thr
 35 40 45
 Ala Leu Pro Asp Gln Val Arg Gln Arg Tyr Gln Glu Asp Ala Ser Asp
 50 55 60
 Met Lys Asp Met Ser Lys Tyr Lys Pro His Ile Leu Leu Ser Gln Glu
 65 70 75 80
 Asn Thr Gln Ile Arg Asp Leu Gln Gln Glu Asn Arg Glu Leu Trp Ile
 85 90 95
 Ser Leu Glu Glu His Gln Asp Ala Leu Glu Leu Ile Met Ser Lys Tyr
 100 105 110
 Arg Lys Gln Met Leu Gln Leu Met Val Ala Lys Lys Ala Val Asp Ala
 115 120 125

Glu Pro Val Leu Lys Ala His Gln Ser His Ser Ala Glu Ile Glu Ser
 130 135 140
 Gln Ile Asp Arg Ile Cys Glu Met Gly Glu Val Met Arg Lys Ala Val
 145 150 155 160
 Gln Val Asp Asp Asp Gln Phe Cys Lys Ile Gln Glu Lys Leu Ala Gln
 165 170 175
 Leu Glu Leu Glu Asn Lys Glu Leu Arg Glu Leu Leu Ser Ile Ser Ser
 180 185 190
 Glu Ser Leu Gln Ala Arg Lys Glu Asn Ser Met Asp Thr Ala Ser Gln
 195 200 205
 Ala Ile Lys
 210

<210> 4211

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4211

Met Cys Tyr Leu Leu Leu Leu Ile Gln Thr Ala Glu Leu Leu Ile
 1 5 10 15
 His Pro Gln Gly Leu Gln Ala Val Ser Asn Gly Glu Ser Ala Leu Lys
 20 25 30
 Gly Thr Arg Pro Thr Phe Ser Ser Pro Phe Ile Leu Val Thr Glu Gly
 35 40 45
 Arg Lys Glu Trp Glu Gly Val Phe Leu Ser Ser Gly Trp Lys Gly Asn
 50 55 60
 Thr Leu Ser Asn Tyr Tyr Ile Ser Leu Val Phe Tyr Tyr Ser Arg Ile
 65 70 75 80
 Leu Gln Pro Tyr Phe Tyr Cys Leu Trp Gly Lys Leu Glu Met Val Thr
 85 90 95
 Leu Ile Arg Ser Val Trp Arg Gly Ile Asn Gly Gly Asp Lys Ile Gln
 100 105 110
 Leu Val Leu Glu Asn Val Lys Val Leu Lys
 115 120

<210> 4212

<211> 1082

<212> PRT

<213> Homo sapiens

<400> 4212

```

Met Ala Pro Glu Asp Lys Asp Pro Asp Leu Glu Thr Ile Leu Asn Ile
  1              5              10              15
Pro Ser Ala Leu Thr Pro Thr Val Val Pro Val Ile Val Thr Val Pro
      20              25              30
Gln Ser Lys Ala Lys Gly Lys Ile Lys Gly Lys Glu Lys Pro Lys Glu
      35              40              45
Ser Leu Lys Glu Glu Glu His Pro Lys Glu Glu Glu Lys Lys Glu Glu
      50              55              60
Glu Val Glu Pro Glu Pro Val Leu Gln Glu Thr Leu Asp Val Pro Thr
      65              70              75              80
Phe Gln Ser Leu Asn Val Ser Cys Pro Ser Gly Leu Leu Leu Thr Phe
      85              90              95
Ile Gly Gln Glu Ser Thr Gly Gln Tyr Val Ile Asp Glu Glu Pro Thr
      100             105             110
Trp Asp Ile Met Val Arg Gln Ser Tyr Pro Gln Arg Val Lys His Tyr
      115             120             125
Glu Phe Tyr Lys Thr Val Met Pro Pro Ala Glu Gln Glu Ala Ser Arg
      130             135             140
Val Ile Thr Ser Gln Gly Thr Val Val Lys Tyr Met Leu Asp Gly Ser
      145             150             155             160
Thr Gln Ile Leu Phe Ala Asp Gly Ala Val Ser Arg Ser Pro Asn Ser
      165             170             175
Gly Leu Ile Cys Pro Pro Ser Glu Met Pro Ala Thr Pro His Ser Gly
      180             185             190
Asp Leu Met Asp Ser Ile Ser Gln Gln Lys Ser Glu Thr Ile Pro Ser
      195             200             205
Glu Ile Thr Asn Thr Lys Lys Gly Lys Ser His Lys Ser Gln Ser Ser
      210             215             220

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Met Ala His Lys Gly Glu Ile His Asp Pro Pro Pro Glu Ala Val Gln
 225 230 235 240
 Thr Val Thr Pro Val Glu Val His Ile Gly Thr Trp Phe Thr Thr Thr
 245 250 255
 Pro Glu Gly Asn Arg Ile Gly Thr Lys Gly Leu Glu Arg Ile Ala Asp
 260 265 270
 Leu Thr Pro Leu Leu Ser Phe Gln Ala Thr Asp Pro Val Asn Gly Thr
 275 280 285
 Val Met Thr Thr Arg Glu Asp Lys Val Val Ile Val Glu Arg Lys Asp
 290 295 300
 Gly Thr Arg Ile Val Asp His Ala Asp Gly Thr Arg Ile Thr Thr Phe
 305 310 315 320
 Tyr Gln Val Tyr Glu Asp Gln Ile Ile Leu Pro Asp Asp Gln Glu Thr
 325 330 335
 Thr Glu Gly Pro Arg Thr Val Thr Arg Gln Val Lys Cys Met Arg Val
 340 345 350
 Glu Ser Ser Arg Tyr Ala Thr Val Ile Ala Asn Cys Glu Asp Ser Ser
 355 360 365
 Cys Cys Ala Thr Phe Gly Asp Gly Thr Thr Ile Ile Ala Lys Pro Gln
 370 375 380
 Gly Thr Tyr Gln Val Leu Pro Pro Asn Thr Gly Ser Leu Tyr Ile Asp
 385 390 395 400
 Lys Asp Cys Ser Ala Val Tyr Cys His Glu Ser Ser Ser Asn Ile Tyr
 405 410 415
 Tyr Pro Phe Gln Lys Arg Glu Gln Leu Arg Ala Gly Arg Tyr Ile Met
 420 425 430
 Arg His Thr Ser Glu Val Ile Cys Glu Val Leu Asp Pro Glu Gly Asn
 435 440 445
 Thr Phe Gln Val Met Ala Asp Gly Ser Ile Ser Thr Ile Leu Pro Glu
 450 455 460
 Lys Lys Leu Glu Asp Asp Leu Asn Glu Lys Thr Glu Gly Tyr Asp Ser
 465 470 475 480
 Leu Ser Ser Met His Leu Glu Lys Asn His Gln Gln Ile Tyr Gly Glu
 485 490 495
 His Val Pro Arg Phe Phe Val Met Tyr Ala Asp Gly Ser Gly Met Glu
 500 505 510

Leu Leu Arg Asp Ser Asp Ile Glu Glu Tyr Leu Ser Leu Ala Tyr Lys
 515 520 525
 Glu Ser Asn Thr Val Val Leu Gln Glu Pro Val Gln Glu Gln Pro Gly
 530 535 540
 Thr Leu Thr Ile Thr Val Leu Arg Pro Phe His Glu Ala Ser Pro Trp
 545 550 555 560
 Gln Val Lys Lys Glu Asp Thr Ile Val Pro Pro Asn Leu Arg Ser Arg
 565 570 575
 Ser Trp Glu Thr Phe Pro Ser Val Glu Lys Lys Thr Pro Gly Pro Pro
 580 585 590
 Phe Gly Thr Gln Ile Trp Lys Gly Leu Cys Ile Glu Ser Lys Gln Leu
 595 600 605
 Val Ser Ala Pro Gly Ala Ile Leu Lys Ser Pro Ser Val Leu Gln Met
 610 615 620
 Arg Gln Phe Ile Gln His Glu Val Ile Lys Asn Glu Val Lys Leu Arg
 625 630 635 640
 Leu Gln Val Ser Leu Lys Asp Tyr Ile Asn Tyr Ile Leu Lys Lys Glu
 645 650 655
 Asp Glu Leu Gln Glu Met Met Ala Lys Asp Ser Arg Thr Glu Glu Glu
 660 665 670
 Arg Gly Asn Ala Ala Asp Leu Leu Lys Leu Val Met Ser Phe Pro Lys
 675 680 685
 Met Glu Glu Thr Thr Lys Ser His Val Thr Glu Val Ala Ala His Leu
 690 695 700
 Thr Asp Leu Phe Lys Gln Ser Leu Ala Thr Pro Pro Lys Cys Pro Pro
 705 710 715 720
 Asp Thr Phe Gly Lys Asp Phe Phe Glu Lys Thr Trp Arg His Thr Ala
 725 730 735
 Ser Ser Lys Arg Trp Lys Glu Lys Ile Asp Lys Thr Arg Lys Glu Ile
 740 745 750
 Glu Thr Thr Gln Asn Tyr Leu Met Asp Ile Lys Asn Arg Ile Ile Pro
 755 760 765
 Pro Phe Phe Lys Ser Glu Leu Asn Gln Leu Tyr Gln Ser Gln Tyr Asn
 770 775 780
 His Leu Asp Ser Leu Ser Lys Lys Leu Pro Ser Phe Thr Lys Lys Asn

785 790 795 800
 Glu Asp Ala Asn Glu Thr Ala Val Gln Asp Thr Ser Asp Leu Asn Leu
 805 810 815
 Asp Phe Lys Pro His Lys Val Ser Glu Gln Lys Ser Ser Gly Val Pro
 820 825 830
 Ser Leu Pro Lys Pro Glu Ile Ser Ala Asp Lys Lys Asp Phe Thr Ala
 835 840 845
 Gln Asn Gln Thr Glu Asn Leu Thr Lys Ser Pro Glu Glu Ala Glu Ser
 850 855 860
 Tyr Glu Pro Val Lys Ile Pro Thr Gln Ser Leu Leu Gln Asp Val Ala
 865 870 875 880
 Gly Gln Thr Arg Lys Glu Lys Val Lys Leu Pro His Tyr Leu Leu Ser
 885 890 895
 Ser Lys Pro Lys Ser Gln Pro Leu Ala Lys Val Gln Asp Ser Val Gly
 900 905 910
 Gly Lys Val Asn Thr Ser Ser Val Ala Ser Ala Ala Ile Asn Asn Ala
 915 920 925
 Lys Ser Ser Leu Phe Gly Phe His Leu Leu Pro Ser Ser Val Lys Phe
 930 935 940
 Gly Val Leu Lys Glu Gly His Thr Tyr Ala Thr Val Val Lys Leu Lys
 945 950 955 960
 Asn Val Gly Val Asp Phe Cys Arg Phe Lys Val Lys Gln Pro Pro Pro
 965 970 975
 Ser Thr Gly Leu Lys Val Thr Tyr Lys Pro Gly Pro Val Ala Ala Gly
 980 985 990
 Met Gln Thr Glu Leu Asn Ile Glu Leu Phe Ala Thr Ala Val Gly Glu
 995 1000 1005
 Asp Gly Ala Lys Gly Ser Ala His Ile Ser His Asn Ile Glu Ile Met
 1010 1015 1020
 Thr Glu His Glu Val Leu Phe Leu Pro Val Glu Ala Thr Val Leu Thr
 1025 1030 1035 1040
 Ser Ser Asn Tyr Asp Lys Arg Pro Lys Asp Phe Pro Gln Gly Lys Glu
 1045 1050 1055
 Asn Pro Met Val Gln Arg Thr Ser Thr Ile Tyr Ser Ser Thr Leu Gly
 1060 1065 1070
 Val Phe Met Ser Arg Lys Val Ser Pro His

1075

1080

<210> 4213

<211> 254

<212> PRT

<213> Homo sapiens

<400> 4213

```

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly
  1             5             10             15
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Ala Leu Val Gln
      20             25             30
Pro Gly Arg Ser Leu Arg Leu Ser Cys Lys Ser Ser Gly Phe Thr Phe
      35             40             45
Gly Asp Tyr Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
      50             55             60
Glu Trp Val Gly Phe Ile Arg Asn Lys Ala Phe Gly Gly Thr Thr Ile
      65             70             75             80
Tyr Ala Ala Ser Val Glu Gly Arg Phe Ser Ile Ser Arg Asp Asp Ser
      85             90             95
Lys Gly Val Ala Tyr Leu Gln Met Ser Ser Leu Gln Thr Glu Asp Thr
      100            105            110
Ala Val Tyr Tyr Cys Thr Arg Asp Ile Phe Val Thr Gly Ile Tyr His
      115            120            125
Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
      130            135            140
Gly Glu Ser Ser Gln Pro Leu Ser Cys Phe Gln Ser Glu Gly Phe His
      145            150            155            160
Tyr Ile Phe Gly Gly Lys Tyr Val Cys Trp Val Ser Cys Gln Lys Ser
      165            170            175
Arg Gly Thr Val Gly Gly Ala Arg Glu Asn Val Leu Arg Gln Arg Arg
      180            185            190
Pro Asn Arg Arg Val Pro Arg Ala Pro Asp Val Pro Ser Ser Ser Ala
      195            200            205
Gln Gln His Gly Ser Val Cys Gly Gln Gly His Pro Gly Pro Leu Gly

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210 215 220
 Ser His Ala Gln Gln Pro Pro Gly Pro Pro Arg Val Gln Ser Glu Arg
 225 230 235 240
 Val Pro Gly Thr Glu Arg Gly Ala Ser Ser Cys Leu Arg Ser
 245 250

<210> 4214

<211> 103

<212> PRT

<213> Homo sapiens

<400> 4214

Met Pro Ser Pro Pro Thr Ala Ser Leu Leu Met Gln Gly Ser Gln Pro
 1 5 10 15
 His Pro Arg Ala Leu His Ile Arg Phe His Ser Cys Lys Tyr Asn Gly
 20 25 30
 Pro Pro Ser Val Leu Gln Ile Ser Pro Ala His His Trp Ala Ser Arg
 35 40 45
 Ala Ala Ala Cys Pro Leu Leu Arg His Leu Ala Gly Gly Ser Leu Pro
 50 55 60
 Cys Ser Pro Cys Gly Arg Asp Pro Arg Ala Leu Val Pro Ala Cys His
 65 70 75 80
 Ser Pro Cys Cys Ile Ser Leu Pro Pro Leu Pro Glu Glu Phe Leu Leu
 85 90 95
 Arg Ala Cys Ser Leu Asn Trp
 100

<210> 4215

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4215

Met Leu Lys Phe Ser Leu Val Phe Leu Phe Phe Leu Phe Phe Pro Arg


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      1             5             10             15
Arg Ser Leu Ala Leu Ser Pro Arg Leu Glu Tyr Asn Gly Met Ile Ser
      20             25             30
Thr His Cys Asn Leu His Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser
      35             40             45
Ala Ser Arg Val Ala Arg Ile Thr Gly Ala His His Asn Val Trp Pro
      50             55             60
Ile Phe Cys Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp Pro Gly
      65             70             75             80
Trp Ser Ile Thr Pro Asp Leu Val Ile Cys Leu Pro Gln Pro Pro Lys
      85             90             95
Val Leu Gly Leu Gln Ala
      100

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<210> 4216

<211> 762

<212> PRT

<213> Homo sapiens

<400> 4216

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Met His Asn Leu Ile Phe Gln Met Tyr Asp Glu Gly Glu Arg Glu Ile
      1             5             10             15
Asn Ile Thr Ser Ala Leu Ala Glu Lys Ile Lys Val Asn Trp Thr Pro
      20             25             30
Glu Ile Asn Lys Glu His Leu Leu Gln Gly Leu Leu Pro Asp Val Gln
      35             40             45
Val Pro Thr Ser Val Lys Asp Met Arg Tyr Cys Gln Val Ser Phe Gln
      50             55             60
Asp Asp His Val Ser Leu Glu Ser Ala Phe Thr Val Arg Pro Leu Pro
      65             70             75             80
Asp Glu Pro Lys His Leu Lys Cys Glu Met Lys Gly Gly Lys Thr Val
      85             90             95
Gln Met Gly Gln Glu Leu Gln Gly Glu Val Val Ile Ile Ile Thr Asp
      100             105             110
Gln Tyr Gly Asn Gln Ile Gln Ala Phe Ser Pro Ser Ser Leu Ser Ser

```

115	120	125
Leu Ser Ile Ala Gly Val Gly Leu Asp Ser Ser Asn Leu Lys Thr Thr		
130	135	140
Phe Gln Glu Asn Thr Gln Ser Ile Ser Val Arg Gly Ile Lys Phe Ile		
145	150	155
Pro Gly Pro Pro Gly Asn Lys Asp Leu Cys Phe Thr Trp Arg Glu Phe		
165	170	175
Ser Asp Phe Ile Arg Val Gln Leu Ile Ser Gly Pro Pro Ala Lys Leu		
180	185	190
Leu Leu Ile Asp Trp Pro Glu Leu Lys Glu Ser Ile Pro Val Ile Asn		
195	200	205
Gly Arg Asp Leu Gln Asn Pro Ile Ile Val Gln Leu Cys Asp Gln Trp		
210	215	220
Asp Asn Pro Ala Pro Val Gln His Val Lys Ile Ser Leu Thr Lys Ala		
225	230	235
Ser Asn Leu Lys Leu Met Pro Ser Asn Gln Gln His Lys Thr Asp Glu		
245	250	255
Lys Gly Arg Ala Asn Leu Gly Val Phe Ser Val Phe Ala Pro Arg Gly		
260	265	270
Glu His Thr Leu Gln Val Lys Ala Ile Tyr Asn Lys Ser Ile Ile Glu		
275	280	285
Gly Pro Ile Ile Lys Leu Met Ile Leu Pro Asp Pro Glu Lys Pro Val		
290	295	300
Arg Leu Asn Val Lys Tyr Asp Lys Asp Ala Ser Phe Leu Ala Gly Gly		
305	310	315
Leu Phe Thr Asp Phe Met Ile Ser Val Ile Ser Glu Asp Asp Ser Ile		
325	330	335
Ile Lys Asn Ile Asn Pro Ala Arg Ile Ser Met Lys Met Trp Lys Leu		
340	345	350
Ser Thr Ser Gly Asn Arg Pro Pro Ala Asn Ala Glu Thr Phe Ser Cys		
355	360	365
Asn Lys Ile Lys Asp Asn Asp Lys Glu Asp Gly Cys Phe Tyr Phe Arg		
370	375	380
Asp Lys Val Ile Pro Asn Lys Val Gly Thr Tyr Cys Ile Gln Phe Gly		
385	390	395
Phe Met Met Asp Lys Thr Asn Ile Leu Asn Ser Glu Gln Val Ile Val		

405	410	415
Glu Val Leu Pro Asn Gln Pro Val Lys Leu Val Pro Lys Ile Lys Pro		
420	425	430
Pro Thr Pro Ala Val Ser Asn Val Arg Ser Val Ala Ser Arg Thr Leu		
435	440	445
Val Arg Asp Leu His Leu Ser Ile Thr Asp Asp Tyr Asp Asn His Thr		
450	455	460
Gly Ile Asp Leu Val Gly Thr Ile Ile Ala Thr Ile Lys Gly Ser Asn		
465	470	475
Glu Glu Asp Thr Asp Thr Pro Leu Phe Ile Gly Lys Val Arg Thr Leu		
485	490	495
Glu Phe Pro Phe Val Asn Gly Ser Ala Glu Ile Met Ser Leu Val Leu		
500	505	510
Ala Glu Ser Ser Pro Gly Arg Asp Ser Thr Glu Tyr Phe Ile Val Phe		
515	520	525
Glu Pro Arg Leu Pro Leu Leu Ser Arg Thr Leu Glu Pro Tyr Ile Leu		
530	535	540
Pro Phe Met Phe Tyr Asn Asp Val Lys Lys Gln Gln Gln Met Ala Ala		
545	550	555
Leu Thr Lys Glu Lys Asp Gln Leu Ser Gln Ser Ile Val Met Tyr Lys		
565	570	575
Ser Leu Phe Glu Ala Ser Gln Gln Leu Leu Asn Glu Met Lys Cys Gln		
580	585	590
Val Glu Glu Ala Arg Leu Lys Glu Ala Gln Leu Arg Asn Glu Leu Lys		
595	600	605
Ile His Asn Ile Asp Ile Pro Thr Thr Gln Gln Val Pro His Ile Glu		
610	615	620
Ala Leu Leu Lys Arg Lys Leu Ser Glu Gln Glu Glu Leu Lys Lys Lys		
625	630	635
Pro Arg Arg Ser Cys Thr Leu Pro Asn Tyr Thr Lys Gly Ser Gly Asp		
645	650	655
Val Leu Gly Lys Ile Ala His Leu Ala Gln Ile Glu Asp Asp Arg Ala		
660	665	670
Ala Met Val Ile Ser Trp His Leu Ala Ser Asp Met Asp Cys Val Val		
675	680	685
Thr Leu Thr Thr Asp Ala Ala Arg Arg Ile Tyr Asp Glu Thr Gln Gly		

690 695 700
 Arg Gln Gln Val Leu Pro Leu Asp Ser Ile Tyr Lys Lys Thr Leu Pro
 705 710 715 720
 Asp Trp Lys Arg Ser Leu Pro His Phe Arg Asn Gly Lys Leu Tyr Phe
 725 730 735
 Lys Pro Ile Gly Asp Pro Val Phe Ala Arg Asp Leu Leu Thr Phe Pro
 740 745 750
 Asp Asn Val Glu His Cys Glu Thr Gly Cys
 755 760

<210> 4217

<211> 171

<212> PRT

<213> Homo sapiens

<400> 4217

Met Lys Cys Ile Pro Tyr Ser Val Leu Leu Lys Asp Leu Glu Met Arg
 1 5 10 15
 Asn Leu Arg Glu Leu Glu Asp Leu Ile Ile Glu Ala Val Tyr Thr Asp
 20 25 30
 Ile Ile Gln Gly Lys Leu Asp Gln Arg Asn Gln Leu Leu Glu Val Asp
 35 40 45
 Phe Cys Ile Gly Arg Asp Ile Arg Lys Lys Asp Ile Asn Asn Ile Val
 50 55 60
 Lys Thr Leu His Glu Trp Cys Asp Gly Cys Glu Ala Val Leu Leu Gly
 65 70 75 80
 Ile Glu Gln Gln Val Leu Arg Ala Asn Gln Tyr Lys Glu Asn His Asn
 85 90 95
 Arg Thr Gln Gln Gln Val Glu Ala Glu Ile Ala Cys Phe Gln Arg Glu
 100 105 110
 Lys Arg Asp Val Pro Leu Leu Asn Leu Ile Thr Thr Ala Phe Phe Trp
 115 120 125
 Leu Pro Thr Ser Arg Arg His Ser Lys Pro Pro His Pro Pro Arg Leu
 130 135 140

Arg Arg Trp Ser Ser Ser Trp Leu Asn Gly Ser Val Pro Leu Thr Leu
 145 150 155 160
 Ser Arg Gly Ser Pro Pro Arg Arg Cys Pro Lys
 165 170

<210> 4218

<211> 608

<212> PRT

<213> Homo sapiens

<400> 4218

Met Arg His Thr Ser Glu Val Ile Cys Glu Val Leu Asp Pro Glu Gly
 1 5 10 15
 Asn Thr Phe Gln Val Met Ala Asp Gly Ser Ile Ser Thr Ile Leu Pro
 20 25 30
 Glu Lys Lys Leu Glu Asp Asp Leu Asn Glu Lys Thr Glu Gly Tyr Asp
 35 40 45
 Ser Leu Ser Ser Met His Leu Glu Lys Asn His Gln Gln Ile Tyr Gly
 50 55 60
 Glu His Val Pro Arg Phe Phe Val Met Tyr Ala Asp Gly Ser Gly Met
 65 70 75 80
 Glu Leu Leu Arg Asp Ser Asp Ile Glu Glu Tyr Leu Ser Leu Ala Tyr
 85 90 95
 Lys Glu Ser Asn Thr Val Val Leu Gln Glu Pro Val Gln Glu Gln Pro
 100 105 110
 Gly Thr Leu Thr Ile Thr Val Leu Arg Pro Phe His Glu Ala Ser Pro
 115 120 125
 Trp Gln Val Lys Lys Glu Asp Thr Ile Val Pro Pro Asn Leu Arg Ser
 130 135 140
 Arg Ser Trp Glu Thr Phe Pro Ser Val Glu Lys Lys Thr Pro Gly Pro
 145 150 155 160
 Pro Phe Gly Thr Gln Ile Trp Lys Gly Leu Cys Ile Glu Ser Lys Gln
 165 170 175
 Leu Val Ser Ala Pro Gly Ala Ile Leu Lys Ser Pro Ser Val Leu Gln
 180 185 190

Met Arg Gln Phe Ile Gln His Glu Val Ile Lys Asn Glu Val Lys Leu
 195 200 205
 Arg Leu Gln Val Ser Leu Lys Asp Tyr Ile Asn Tyr Ile Leu Lys Lys
 210 215 220
 Glu Asp Glu Leu Gln Glu Met Met Val Lys Asp Ser Arg Thr Glu Glu
 225 230 235 240
 Glu Arg Gly Asn Ala Ala Asp Leu Leu Lys Leu Val Met Ser Phe Pro
 245 250 255
 Lys Met Glu Glu Thr Thr Lys Ser His Val Thr Glu Val Ala Ala His
 260 265 270
 Leu Thr Asp Leu Phe Lys Gln Ser Leu Ala Thr Pro Pro Lys Cys Pro
 275 280 285
 Pro Asp Thr Phe Gly Lys Asp Phe Phe Glu Lys Thr Trp Arg His Thr
 290 295 300
 Ala Ser Ser Lys Arg Trp Lys Glu Lys Ile Asp Lys Thr Arg Lys Glu
 305 310 315 320
 Ile Glu Thr Thr Gln Asn Tyr Leu Met Asp Ile Lys Asn Arg Ile Ile
 325 330 335
 Pro Pro Phe Phe Lys Ser Glu Leu Asn Gln Leu Tyr Gln Ser Gln Tyr
 340 345 350
 Asn His Leu Asp Ser Leu Ser Lys Lys Leu Pro Ser Phe Thr Lys Lys
 355 360 365
 Asn Glu Asp Ala Asn Glu Thr Ala Val Gln Asp Thr Ser Asp Leu Asn
 370 375 380
 Leu Asp Phe Lys Pro His Lys Val Ser Glu Gln Lys Ser Ser Ser Val
 385 390 395 400
 Pro Ser Leu Pro Lys Pro Glu Ile Ser Ala Asp Lys Lys Asp Phe Thr
 405 410 415
 Ala Gln Asn Gln Thr Glu Asn Leu Thr Lys Ser Pro Glu Glu Ala Glu
 420 425 430
 Ser Tyr Glu Pro Val Lys Ile Pro Thr Gln Ser Leu Leu Gln Asp Val
 435 440 445
 Ala Gly Gln Thr Arg Lys Glu Lys Val Lys Leu Pro His Tyr Leu Leu
 450 455 460
 Ser Ser Lys Pro Lys Ser Gln Pro Leu Ala Lys Val Gln Asp Ser Val
 465 470 475 480

Gly Gly Lys Val Asn Thr Ser Ser Val Ala Ser Ala Ala Ile Asn Asn
 485 490 495
 Ala Lys Ser Ser Leu Phe Gly Phe His Pro Leu Pro Ser Ser Val Lys
 500 505 510
 Phe Gly Val Leu Lys Glu Gly His Thr Tyr Ala Thr Val Val Lys Leu
 515 520 525
 Lys Asn Val Gly Val Asp Phe Cys Arg Phe Lys Val Lys Gln Pro Pro
 530 535 540
 Pro Ser Thr Gly Leu Lys Val Thr Tyr Lys Pro Gly Pro Val Ala Ala
 545 550 555 560
 Gly Met Gln Thr Glu Leu Asn Ile Glu Leu Phe Ala Thr Ala Val Gly
 565 570 575
 Glu Asp Gly Ala Lys Gly Ser Ala His Ile Ser His Asn Ile Glu Ile
 580 585 590
 Met Thr Glu His Glu Val Leu Phe Leu Pro Val Glu Ala Asn Ile Leu
 595 600 605

<210> 4219

<211> 252

<212> PRT

<213> Homo sapiens

<400> 4219

Met Ser Cys Trp Val His Leu Pro Asp Gly Val Val Ala Gly Gln Arg
 1 5 10 15
 Gly Phe Ser Leu Pro Ser Arg Gly Gly Arg Ala Glu Ala Pro Leu Thr
 20 25 30
 Ser Arg Thr Arg Arg Leu Ala Gly Arg Gly Ala Asp Pro Pro Pro Pro
 35 40 45
 Pro Ser Arg Met Gly Arg Leu Ala Gly Arg Gly Ala Asp Pro Pro Pro
 50 55 60
 Pro Pro Ser Arg Thr Gly Arg Leu Ala Trp Arg Gly Leu Thr Pro Thr
 65 70 75 80
 Ser Leu Leu Asp Gly Val Ala Ala Gly Arg Arg Arg Ser Ser Pro Pro
 85 90 95

Arg Arg Gly Gly Cys Arg Ala Asp Arg Leu Leu Thr Ser Gln Thr Gly
 100 105 110
 Arg Leu Pro Gly Gly Gly Ala Pro His Phe Leu Asp Gly Ala Val Ala
 115 120 125
 Arg Arg Arg Val Ser Ser Leu Leu Arg Trp Gly Gly Arg Ala Glu Thr
 130 135 140
 Leu Leu Thr Ser Gln Thr Gly Ser Arg Pro Gly Arg Gly Ala Pro His
 145 150 155 160
 Ile Pro Asp Gly Ala Ala Gly Gln Arg Arg Ser Pro His Leu Arg Arg
 165 170 175
 Trp Ala Ala Gly Gln Arg Arg Ser Ser Leu Pro Arg Trp Asp Gly Gly
 180 185 190
 Gly Ala Glu Thr Leu Leu Thr Phe Gln Thr Gly Gln Pro Gly Arg Gly
 195 200 205
 Ala Pro His Val Pro Asp Asp Gly Arg Pro Gly Arg Asp Ala Pro His
 210 215 220
 Phe Pro Asp Gly Val Ala Ala Gly Gln Arg Leu Gln Ser Arg His Phe
 225 230 235 240
 Gly Arg Pro Arg Gln Ala Gly Gly Arg Trp Arg Leu
 245 250

<210> 4220

<211> 101

<212> PRT

<213> Homo sapiens

<400> 4220

Met Leu Leu Val Ala Met Phe Gly Leu Trp Gly Asp Arg Cys Phe Leu
 1 5 10 15
 Phe Thr Ser Leu Cys Phe Leu Leu Phe Ser Ala Met Asn Phe Cys Phe
 20 25 30
 Ile Ile Arg Asn Asn Ser Arg Tyr Phe Lys Leu His Asn Glu Ile Asn
 35 40 45
 Asn Leu Gly His Thr Lys Phe Val Met Asp Ser Glu Leu Gln Gly Thr

50 55 60
 Gly Gln Pro Tyr Gln Ala Gln Pro Pro Ser Pro Ala Ala Val Gly His
 65 70 75 80
 Arg Ile Leu Ser Lys Trp Val Gln Met Glu Ile Pro Val Gln Trp Leu
 85 90 95
 Tyr Ser Asp Val Asp
 100

<210> 4221

<211> 343

<212> PRT

<213> Homo sapiens

<400> 4221

Met Ile Gln Glu Pro Ala Leu Pro Pro Gly Trp Glu Met Lys Tyr Thr
 1 5 10 15
 Ser Glu Gly Val Arg Tyr Phe Val Asp His Asn Thr Arg Thr Thr Thr
 20 25 30
 Phe Lys Asp Pro Arg Pro Gly Phe Glu Ser Gly Thr Lys Gln Gly Ser
 35 40 45
 Pro Gly Ala Tyr Asp Arg Ser Phe Arg Trp Lys Tyr His Gln Phe Arg
 50 55 60
 Phe Leu Cys His Ser Asn Ala Leu Pro Ser His Val Lys Ile Ser Val
 65 70 75 80
 Ser Arg Gln Thr Leu Phe Glu Asp Ser Phe Gln Gln Ile Met Asn Met
 85 90 95
 Lys Pro Tyr Asp Leu Arg Arg Arg Leu Phe Ile Ile Met Arg Gly Glu
 100 105 110
 Glu Gly Leu Asp Tyr Gly Gly Ile Ala Arg Glu Trp Phe Phe Leu Leu
 115 120 125
 Ser His Glu Val Leu Asn Pro Met Tyr Cys Leu Phe Glu Tyr Ala Gly
 130 135 140
 Lys Asn Asn Tyr Cys Leu Gln Ile Asn Pro Ala Ser Ser Ile Asn Pro
 145 150 155 160
 Asp His Leu Thr Tyr Phe Arg Phe Ile Gly Arg Phe Ile Ala Met Ala

	165		170		175
Leu Tyr His Gly Lys Phe Ile Asp Thr Gly Phe Thr Leu Pro Phe Tyr					
	180		185		190
Lys Arg Met Leu Asn Lys Arg Pro Thr Leu Lys Asp Leu Glu Ser Ile					
	195		200		205
Asp Pro Glu Phe Tyr Asn Ser Ile Val Trp Ile Lys Glu Asn Asn Leu					
	210		215		220
Glu Glu Cys Gly Leu Glu Leu Tyr Phe Ile Gln Asp Met Glu Ile Leu					
225		230		235	240
Gly Lys Val Thr Thr His Glu Leu Lys Glu Gly Gly Glu Ser Ile Arg					
	245		250		255
Val Thr Glu Glu Asn Lys Glu Glu Tyr Ile Met Leu Leu Thr Asp Trp					
	260		265		270
Arg Phe Thr Arg Gly Val Glu Glu Gln Thr Lys Ala Phe Leu Asp Gly					
	275		280		285
Phe Asn Glu Val Ala Pro Leu Glu Trp Leu Arg Tyr Phe Asp Glu Lys					
	290		295		300
Glu Leu Glu Leu Met Leu Cys Gly Met Gln Glu Ile Asp Arg Ala Thr					
305		310		315	320
Gly Arg Arg Ala Pro Ser Thr Gly Thr Thr Pro Arg Thr Ala Ser Arg					
	325		330		335
Ser Ser Gly Ser Gly Arg Trp					
	340				

<210> 4222

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4222

Met Arg Trp Arg Ala Asp Gly Arg Ser Leu Glu Lys Leu Pro Val His			
1	5	10	15
Met Gly Leu Val Ile Thr Glu Val Glu Gln Glu Pro Ser Phe Ser Asp			
	20	25	30
Ile Ala Ser Leu Val Val Trp Cys Met Ala Val Gly Ile Ser Tyr Ile			

35	40	45
Ser Val Tyr Asp His Gln Gly Ile Phe Lys Arg Asn Asn Ser Arg Leu		
50	55	60
Met Asp Glu Ile Leu Lys Gln Gln Gln Glu Leu Leu Gly Leu Asp Cys		
65	70	75
Ser Lys Tyr Ser Pro Glu Phe Ala Asn Ser Asn Asp Lys Asp Asp Gln		
85	90	95
Val Leu Asn Cys His Leu Ala Val Lys Val Leu Ser Pro Glu Asp Gly		
100	105	110
Lys Ala Asp Ile Val Arg Ala Ala Gln Asp Phe Cys Gln Leu Val Ala		
115	120	125
Gln Lys Gln Lys Arg Pro Thr Asp Leu Asp Val Asp Thr Leu Ala Ser		
130	135	140
Leu Leu Ser Ser Asn Gly Cys Pro Asp Pro Asp Leu Val Leu Lys Phe		
145	150	155
Gly Pro Val Asp Ser Thr Leu Gly Phe Leu Pro Trp His Ile Arg Leu		
165	170	175
Thr Glu Ile Val Ser Leu Pro Ser His Leu Asn Ile Ser Tyr Glu Asp		
180	185	190
Phe Phe Ser Ala Leu Arg Gln Tyr Ala Ala Cys Glu Gln Arg Leu Gly		
195	200	205
Lys		

<210> 4223

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4223

Met Gly Val Gly Asn Ile Ala Gly Ser Glu Ser Ser Glu Val Gly Met
1 5 10 15
Glu Val Ser Gln Leu Arg Leu Gly Pro Phe Cys Arg Ala Leu Ser Val
20 25 30
Tyr Ser Trp Phe Ser Ile Arg Gly Gln Pro Ala Gly Gly Leu Glu Asn

35 40 45
 Arg Ser Leu Gly Thr Lys Gln Gly Leu Cys Pro Gly Ala Cys Tyr Val
 50 55 60
 Ala Gln Pro Thr Arg Leu Ser Pro Arg Gln Ser Cys Pro Lys Pro Arg
 65 70 75 80
 Lys Leu Met Tyr His Pro Arg Gly Arg Glu Pro Thr Phe Pro Ser Lys
 85 90 95
 Glu Val Phe Tyr Leu Trp
 100

<210> 4224

<211> 885

<212> PRT

<213> Homo sapiens

<400> 4224

Met Gln Glu Ala Ile Ile Leu Leu Ala Leu Leu Gly Ala Met Ser Gly
 1 5 10 15
 Gly Glu Ala Leu His Leu Ile Leu Leu Pro Ala Thr Gly Asn Val Ala
 20 25 30
 Glu Asn Ser Pro Pro Gly Thr Ser Val His Lys Phe Ser Val Lys Leu
 35 40 45
 Ser Ala Ser Leu Ser Pro Val Ile Pro Gly Phe Pro Gln Ile Val Asn
 50 55 60
 Ser Asn Pro Leu Thr Glu Ala Phe Arg Val Asn Trp Leu Ser Gly Thr
 65 70 75 80
 Tyr Phe Glu Val Val Thr Thr Gly Met Glu Gln Leu Asp Phe Glu Thr
 85 90 95
 Gly Pro Asn Ile Phe Asp Leu Gln Ile Tyr Val Lys Asp Glu Val Gly
 100 105 110
 Val Thr Asp Leu Gln Val Leu Thr Val Gln Val Thr Asp Val Asn Glu
 115 120 125
 Pro Pro Gln Phe Gln Gly Asn Leu Ala Glu Gly Leu His Leu Tyr Ile
 130 135 140
 Val Glu Arg Ala Asn Pro Gly Phe Ile Tyr Gln Val Glu Ala Phe Asp

145	150	155	160
Pro Glu Asp Thr Ser Arg Asn Ile Pro Leu Ser Tyr Phe Leu Ile Ser			
	165	170	175
Pro Pro Lys Ser Phe Arg Met Ser Ala Asn Gly Thr Leu Phe Ser Thr			
	180	185	190
Thr Glu Leu Asp Phe Glu Ala Gly His Arg Ser Phe His Leu Ile Val			
	195	200	205
Glu Val Arg Asp Ser Gly Gly Leu Lys Ala Ser Thr Glu Leu Gln Val			
	210	215	220
Asn Ile Val Asn Leu Asn Asp Glu Val Pro Arg Phe Thr Ser Pro Thr			
225	230	235	240
Arg Val Tyr Thr Val Leu Glu Glu Leu Ser Pro Gly Thr Ile Val Ala			
	245	250	255
Asn Ile Thr Ala Glu Asp Pro Asp Asp Glu Gly Phe Pro Ser His Leu			
	260	265	270
Leu Tyr Ser Ile Thr Thr Val Ser Lys Tyr Phe Met Ile Asn Gln Leu			
	275	280	285
Thr Gly Thr Ile Gln Val Ala Gln Arg Ile Asp Arg Asp Ala Gly Glu			
	290	295	300
Leu Arg Gln Asn Pro Thr Ile Ser Leu Glu Val Leu Val Lys Asp Arg			
305	310	315	320
Pro Tyr Gly Gly Gln Glu Asn Arg Ile Gln Ile Thr Phe Ile Val Glu			
	325	330	335
Asp Val Asn Asp Asn Pro Ala Thr Cys Gln Lys Phe Thr Phe Ser Ile			
	340	345	350
Met Val Pro Glu Arg Thr Ala Lys Gly Thr Leu Leu Leu Asp Leu Asn			
	355	360	365
Lys Phe Cys Phe Asp Asp Asp Ser Glu Ala Pro Asn Asn Arg Phe Asn			
	370	375	380
Phe Thr Met Pro Ser Gly Val Gly Ser Gly Ser Arg Phe Leu Gln Asp			
385	390	395	400
Pro Ala Gly Ser Gly Lys Ile Val Leu Ile Gly Asp Leu Asp Tyr Glu			
	405	410	415
Asn Pro Ser Asn Leu Ala Ala Gly Asn Lys Tyr Thr Val Ile Ile Gln			
	420	425	430
Val Gln Asp Val Ala Pro Pro Tyr Tyr Lys Asn Asn Val Tyr Val Tyr			

435	440	445
Ile Leu Thr Ser Pro Glu Asn Glu Phe Pro Leu Ile Phe Asp Arg Pro		
450	455	460
Ser Tyr Val Phe Asp Val Ser Glu Arg Arg Pro Ala Arg Thr Arg Val		
465	470	475
Gly Gln Val Arg Ala Thr Asp Lys Asp Leu Pro Gln Ser Ser Leu Leu		
	485	490
		495
Tyr Ser Ile Ser Thr Gly Gly Ala Ser Leu Gln Tyr Pro Asn Val Phe		
	500	505
		510
Trp Ile Asn Pro Lys Thr Gly Glu Leu Gln Leu Val Thr Lys Val Asp		
	515	520
		525
Cys Glu Thr Thr Pro Ile Tyr Ile Leu Arg Ile Gln Ala Thr Asn Asn		
	530	535
		540
Glu Asp Thr Ser Ser Val Thr Val Thr Val Asn Ile Leu Glu Glu Asn		
545	550	555
		560
Asp Glu Lys Pro Ile Cys Thr Pro Asn Ser Tyr Phe Leu Ala Leu Pro		
	565	570
		575
Val Asp Leu Lys Val Gly Thr Asn Ile Gln Asn Phe Lys Leu Thr Cys		
	580	585
		590
Thr Asp Leu Asp Ser Ser Pro Arg Ser Phe Arg Tyr Ser Ile Gly Pro		
	595	600
		605
Gly Asn Val Asn Asn His Phe Thr Phe Ser Pro Asn Ala Gly Ser Asn		
	610	615
		620
Val Thr Arg Leu Leu Leu Thr Ser Arg Phe Asp Tyr Ala Gly Gly Phe		
625	630	635
		640
Asp Lys Ile Trp Asp Tyr Lys Leu Leu Val Tyr Val Thr Asp Asp Asn		
	645	650
		655
Leu Met Ser Asp Arg Lys Lys Ala Glu Ala Leu Val Glu Thr Gly Thr		
	660	665
		670
Val Thr Leu Ser Ile Lys Val Ile Pro His Pro Thr Thr Ile Ile Thr		
	675	680
		685
Thr Thr Pro Arg Pro Arg Val Thr Tyr Gln Val Leu Arg Lys Asn Val		
	690	695
		700
Tyr Ser Pro Ser Ala Trp Tyr Val Pro Phe Val Ile Thr Leu Gly Ser		
705	710	715
		720
Ile Leu Leu Leu Gly Leu Leu Val Tyr Leu Val Val Leu Leu Ala Lys		

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              725              730              735
Ala Ile His Arg His Cys Pro Cys Lys Thr Gly Lys Asn Lys Glu Pro
              740              745              750
Leu Thr Lys Lys Gly Glu Thr Lys Thr Ala Glu Arg Asp Val Val Val
              755              760              765
Glu Thr Ile Gln Met Asn Thr Ile Phe Asp Gly Glu Ala Ile Asp Pro
              770              775              780
Val Thr Gly Glu Thr Tyr Glu Phe Asn Ser Lys Thr Gly Ala Arg Lys
785              790              795              800
Trp Lys Asp Pro Leu Thr Gln Met Pro Lys Trp Lys Glu Ser Ser His
              805              810              815
Gln Gly Ala Ala Pro Arg Arg Val Thr Ala Gly Glu Gly Met Gly Ser
              820              825              830
Leu Arg Ser Ala Asn Trp Glu Glu Asp Glu Leu Ser Gly Lys Ala Trp
              835              840              845
Ala Glu Asp Ala Gly Leu Gly Ser Arg Asn Glu Gly Gly Lys Leu Gly
              850              855              860
Asn Pro Lys Asn Arg Asn Pro Ala Phe Met Asn Arg Ala Tyr Pro Lys
865              870              875              880
Pro His Pro Gly Lys
              885

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<210> 4225

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4225

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Met Asp Asn Pro Leu Leu Lys Tyr Ser Ala Lys Asp Tyr Phe Phe Lys
  1              5              10              15
Ala Ala Leu Cys His Phe Ile Val Asp Glu Leu Asn Val Lys Leu Ala
              20              25              30
Leu Glu Lys Tyr Glu Glu Met Phe Pro Ala Phe Thr Asp Ser Arg Glu
              35              40              45
Cys Lys Leu Leu Lys Lys Leu Leu Glu Ala His Glu Glu Gln Asn Ser

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50 55 60
 Glu Ala Tyr Thr Glu Ala Val Lys Glu Phe Asp Ser Ile Ser Arg Leu
 65 70 75 80
 Asp Gln Trp Leu Thr Thr Met Leu Leu Arg Ile Lys Lys Ser Ile Gln
 85 90 95
 Gly Asp Gly Glu Gly Asp Gly Asp Leu Lys
 100 105

<210> 4226

<211> 403

<212> PRT

<213> Homo sapiens

<400> 4226

Met Asn Asn Asn Met Ser Leu Gln Asp Ala Glu Trp Tyr Trp Gly Asp
 1 5 10 15
 Ile Ser Arg Glu Glu Val Asn Glu Lys Leu Arg Asp Thr Ala Asp Gly
 20 25 30
 Thr Phe Leu Val Arg Asp Ala Ser Thr Lys Met His Gly Asp Tyr Thr
 35 40 45
 Leu Thr Leu Arg Lys Gly Gly Asn Asn Lys Leu Ile Lys Ile Phe His
 50 55 60
 Arg Asp Gly Lys Tyr Gly Phe Ser Asp Pro Leu Thr Phe Ser Ser Val
 65 70 75 80
 Val Glu Leu Ile Asn His Tyr Arg Asn Glu Ser Leu Ala Gln Tyr Asn
 85 90 95
 Pro Lys Leu Asp Val Lys Leu Leu Tyr Pro Val Ser Lys Tyr Gln Gln
 100 105 110
 Asp Gln Val Val Lys Glu Asp Asn Ile Glu Ala Val Gly Lys Lys Leu
 115 120 125
 His Glu Tyr Asn Thr Gln Phe Gln Glu Lys Ser Arg Glu Tyr Asp Arg
 130 135 140
 Leu Tyr Glu Glu Tyr Thr Arg Thr Ser Gln Glu Ile Gln Met Lys Arg
 145 150 155 160
 Thr Ala Ile Glu Ala Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu Gln

	165		170		175										
Cys	Gln	Thr	Gln	Glu	Arg	Tyr	Ser	Lys	Glu	Tyr	Ile	Glu	Lys	Phe	Lys
	180		185		190										
Arg	Glu	Gly	Asn	Glu	Lys	Glu	Ile	Gln	Arg	Ile	Met	His	Asn	Tyr	Asp
	195		200		205										
Lys	Leu	Lys	Ser	Arg	Ile	Ser	Glu	Ile	Ile	Asp	Ser	Arg	Arg	Arg	Leu
	210		215		220										
Glu	Glu	Asp	Leu	Lys	Lys	Gln	Ala	Ala	Glu	Tyr	Arg	Glu	Ile	Asp	Lys
225			230		235				240						
Arg	Met	Asn	Ser	Ile	Lys	Pro	Asp	Leu	Ile	Gln	Leu	Arg	Lys	Thr	Arg
	245		250		255										
Asp	Gln	Tyr	Leu	Met	Trp	Leu	Thr	Gln	Lys	Gly	Val	Arg	Gln	Lys	Lys
	260		265		270										
Leu	Asn	Glu	Trp	Leu	Gly	Asn	Glu	Asn	Thr	Glu	Asp	Gln	Tyr	Ser	Leu
	275		280		285										
Val	Glu	Asp	Asp	Glu	Asp	Leu	Pro	His	His	Asp	Glu	Lys	Thr	Trp	Asn
	290		295		300										
Val	Gly	Ser	Ser	Asn	Arg	Asn	Lys	Ala	Glu	Asn	Leu	Leu	Arg	Gly	Lys
305			310		315				320						
Arg	Asp	Gly	Thr	Phe	Leu	Val	Arg	Glu	Ser	Ser	Lys	Gln	Gly	Cys	Tyr
	325		330		335										
Ala	Cys	Ser	Val	Val	Val	Asp	Gly	Glu	Val	Lys	His	Cys	Val	Ile	Asn
	340		345		350										
Lys	Thr	Ala	Thr	Gly	Tyr	Gly	Phe	Ala	Glu	Pro	Tyr	Asn	Leu	Tyr	Ser
	355		360		365										
Ser	Leu	Lys	Glu	Leu	Val	Leu	His	Tyr	Gln	His	Thr	Ser	Leu	Val	Gln
	370		375		380										
His	Asn	Asp	Ser	Leu	Asn	Val	Thr	Leu	Ala	Tyr	Pro	Val	Tyr	Ala	Gln
385			390		395				400						
Gln	Arg	Arg													

<210> 4227

<211> 369

<212> PRT

<213> Homo sapiens

<400> 4227

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Met Leu Trp Glu Glu Thr Gly Ala Ala Pro Ala Pro Ala Arg Ala Ser
  1             5             10            15
Asp Leu Pro Tyr Arg Ile Ser Ser Asp His Leu Lys Lys Glu Glu Lys
      20             25            30
Met Thr Met Met Ala His Gln Tyr Pro Ser Trp Ile Phe Ile Asn Glu
      35             40            45
Lys Thr Phe Ile Thr Arg Glu Gln Leu Asn Ser Leu Leu Lys Thr Tyr
      50             55            60
Asn Ile Phe Tyr Glu Asn Gln Lys Asn Leu His Ile Leu Tyr Gly Glu
      65             70            75            80
Thr Glu Asp Gly Lys Leu Ile Val Glu Gly Met Leu Asp Ile Phe Trp
      85             90            95
Gly Val Lys Arg Pro Ile Gln Leu Lys Ile Gln Asp Glu Lys Pro Phe
      100            105            110
Ser Ser Phe Thr Ser Met Lys Ser Ser Asp Val Phe Ser Ser Lys Gly
      115            120            125
Met Thr Arg Trp Gly Glu Phe Asp Asp Leu Tyr Arg Ile Ser Glu Leu
      130            135            140
Asp Arg Thr Gln Ile Pro Met Ser Glu Lys Arg Asn Ser Gln Glu Asp
      145            150            155            160
Tyr Leu Ser Tyr His Ser Asn Thr Leu Lys Pro His Ala Lys Asp Glu
      165            170            175
Pro Asp Ser Pro Val Leu Tyr Arg Thr Met Ser Glu Ala Ala Leu Val
      180            185            190
Arg Lys Arg Met Lys Pro Leu Met Met Asp Arg Lys Glu Arg Gln Lys
      195            200            205
Asn Arg Ala Ser Ile Asn Gly His Phe Tyr Asn His Glu Thr Ser Ile
      210            215            220
Phe Ile Pro Ala Phe Glu Ser Glu Thr Lys Val Arg Val Asn Ser Asn
      225            230            235            240
Met Arg Thr Glu Glu Val Ile Lys Gln Leu Leu Gln Lys Phe Lys Ile

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245 250 255
 Glu Asn Ser Pro Gln Asp Phe Ala Leu His Ile Ile Phe Ala Thr Gly
 260 265 270
 Glu Gln Arg Arg Leu Lys Lys Thr Asp Ile Pro Leu Leu Gln Arg Leu
 275 280 285
 Leu Gln Gly Pro Ser Glu Lys Asn Ala Arg Ile Phe Leu Met Asp Lys
 290 295 300
 Asp Ala Glu Glu Ile Ser Ser Asp Val Ala Gln Tyr Ile Asn Phe His
 305 310 315 320
 Phe Ser Leu Leu Glu Ser Ile Leu Gln Arg Leu Asn Glu Glu Glu Lys
 325 330 335
 Arg Glu Ile Gln Arg Ile Val Thr Lys Phe Asn Lys Glu Lys Ala Ile
 340 345 350
 Ile Leu Lys Cys Leu Gln Asn Lys Leu Val Ile Lys Thr Glu Thr Thr
 355 360 365
 Val

<210> 4228

<211> 116

<212> PRT

<213> Homo sapiens

<400> 4228

Met Ala Trp Asp Ala Gly Ala Trp Val Glu Arg Arg Gly Pro Gln Ala
 1 5 10 15
 Ala Ala Val Leu Pro Ile Gly His Thr Val Gln Gly Ala Ser Lys Ala
 20 25 30
 Thr Lys His Thr Pro Gln Pro Ser Gly Cys Leu Trp Leu Thr Thr Cys
 35 40 45
 Leu Glu Thr Phe Thr Leu Gly His Met Ile Phe Leu Pro Thr His Pro
 50 55 60
 Leu Pro Pro Pro Ser Gly Arg Cys Gln Gln Arg Ala Pro Trp Glu Pro
 65 70 75 80
 Gly Leu Leu Val Glu Ala Trp Leu Glu Gly Arg Val Ser Leu Glu Trp

85 90 95
 Thr Asp Ala Leu Pro Pro Leu Gln Ser Leu Thr Ala Ala Ala Pro Ser
 100 105 110
 Gln Met Gln Asn
 115

<210> 4229

<211> 325

<212> PRT

<213> Homo sapiens

<400> 4229

Met Leu Cys Pro Trp Arg Thr Ala Asn Leu Gly Leu Leu Leu Ile Leu
 1 5 10 15
 Thr Ile Phe Leu Val Ala Ala Ser Ser Ser Leu Cys Met Asp Glu Lys
 20 25 30
 Gln Ile Thr Gln Asn Tyr Ser Lys Val Leu Ala Glu Val Asn Thr Ser
 35 40 45
 Trp Pro Val Lys Met Ala Thr Asn Ala Val Leu Cys Cys Pro Pro Ile
 50 55 60
 Ala Leu Arg Asn Leu Ile Ile Ile Thr Trp Glu Ile Ile Leu Arg Gly
 65 70 75 80
 Gln Pro Ser Cys Thr Lys Ala Tyr Arg Lys Glu Thr Asn Glu Thr Lys
 85 90 95
 Glu Thr Asn Cys Thr Asp Glu Arg Ile Thr Trp Val Ser Arg Pro Asp
 100 105 110
 Gln Asn Ser Asp Leu Gln Ile Arg Pro Val Ala Ile Thr His Asp Gly
 115 120 125
 Tyr Tyr Arg Cys Ile Met Val Thr Pro Asp Gly Asn Phe His Arg Gly
 130 135 140
 Tyr His Leu Gln Val Leu Val Thr Pro Glu Val Thr Leu Phe Gln Asn
 145 150 155 160
 Arg Asn Arg Thr Ala Val Cys Lys Ala Val Ala Gly Lys Pro Ala Ala
 165 170 175
 Gln Ile Ser Trp Ile Pro Glu Gly Asp Cys Ala Thr Lys Gln Glu Tyr

180	185	190
Trp Ser Asn Gly Thr Val Thr Val Lys Ser Thr Cys His Trp Glu Val		
195	200	205
His Asn Val Ser Thr Val Thr Cys His Val Ser His Leu Thr Gly Asn		
210	215	220
Lys Ser Leu Tyr Ile Glu Leu Leu Pro Val Pro Gly Ala Lys Lys Ser		
225	230	235
Ala Lys Leu Tyr Ile Pro Tyr Ile Ile Leu Thr Ile Ile Ile Leu Thr		
245	250	255
Ile Val Gly Phe Ile Trp Leu Leu Lys Val Asn Gly Cys Arg Lys Tyr		
260	265	270
Lys Leu Asn Lys Thr Glu Ser Thr Pro Val Val Glu Glu Asp Glu Met		
275	280	285
Gln Pro Tyr Ala Ser Tyr Thr Glu Lys Asn Asn Pro Leu Tyr Asp Thr		
290	295	300
Thr Asn Lys Val Lys Ala Ser Gln Ala Leu Gln Ser Glu Val Asp Thr		
305	310	315
Asp Leu His Thr Leu		
325		

<210> 4230

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4230

Met His Ser Thr Gln Asp Lys Ser Leu His Leu Glu Gly Asp Pro Asn		
1	5	10
Pro Ser Ala Ala Pro Thr Ser Thr Cys Ala Pro Arg Lys Met Pro Lys		
20	25	30
Arg Ile Ser Ile Ser Lys Gln Leu Ala Ser Val Lys Ala Leu Arg Lys		
35	40	45
Cys Ser Asp Leu Glu Lys Ala Ile Ala Thr Thr Ala Leu Ile Phe Arg		

50 55 60
 Asn Ser Ser Asp Ser Asp Gly Lys Leu Glu Lys Ala Ile Ala Lys Asp
 65 70 75 80
 Leu Leu Gln Thr Gln Phe Arg Asn Phe Ala Glu Pro Cys Glu Asp Ser
 85 90 95
 Arg Arg Ser Trp Pro Ser Ala Lys Leu Glu Glu Ser Thr Leu Ser Arg
 100 105 110
 His Trp Ile
 115

<210> 4231

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4231

Met Ala Ala Leu Ile Cys Pro Ala Ser Pro Gln His Phe Pro Phe Leu
 1 5 10 15
 His Ser Phe Trp Asp Pro Thr Trp Leu Leu Ser His Leu Ala Thr Ser
 20 25 30
 Gln Thr His Leu Pro Met Gly Thr Ser Arg Ser Ala Pro Gly Pro Val
 35 40 45
 Leu Ser Ser Ser Leu His Ser Pro Arg Cys Leu Leu Leu Val Phe
 50 55 60
 Asn Thr Thr Tyr Gly His Arg Ala Ile Gly Trp His Thr Ser Ala Phe
 65 70 75 80
 Ser Pro Asp Cys Ser Leu Glu Leu Arg Ile Leu Phe Ser Asn Ala Phe
 85 90 95
 Leu Thr Leu Ala His Arg Gln Leu Ile Arg Leu Leu Lys Leu Asp Ile
 100 105 110
 Val Lys Thr Leu Ser Cys Ser Pro Phe Gln Ala Phe Leu Ser Leu Pro
 115 120 125
 Pro Ile Asn Ser Thr Ser Val Leu Ala Ala Asp Pro Ala Lys Asp Leu
 130 135 140
 Gly Val Ser Leu Phe Pro Pro Phe Pro Arg Ser

145

150

155

<210> 4232

<211> 490

<212> PRT

<213> Homo sapiens

<400> 4232

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Met Asp Leu Met Cys Lys Lys Met Lys His Leu Trp Phe Phe Leu Leu
  1              5              10              15
Leu Val Ala Ala Pro Gly Trp Val Leu Ser Gln Leu Gln Leu Gln Glu
      20              25              30
Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
      35              40              45
Ser Val Ser Gly Ala Ser Met Thr Thr Ser Glu Tyr Tyr Trp Ala Trp
      50              55              60
Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly Asn Ile Phe
      65              70              75              80
Tyr Thr Gly Arg Thr Phe Tyr Asn Pro Ser Leu Lys Ser Arg Leu Ser
      85              90              95
Leu Ser Ile Asp Thr Ala Thr Ser Gln Phe Ser Leu Ser Leu Arg Ser
      100             105             110
Val Thr Ala Ala Asp Thr Ala Ile Tyr Phe Cys Ala Arg His Leu Asn
      115             120             125
Thr Val Thr Ile Tyr Arg Gln Pro Phe Asp His Trp Gly Gln Gly Ala
      130             135             140
Leu Val Thr Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro
      145             150             155             160
Leu Ser Leu Asp Ser Thr Pro Gln Asp Gly Asn Val Val Val Ala Cys
      165             170             175
Leu Val Gln Gly Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser
      180             185             190
Glu Ser Gly Gln Asn Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp
      195             200             205
Ala Ser Gly Asp Leu Tyr Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala

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210	215	220	
Thr Gln Cys Pro Asp Gly Lys Ser Val Thr Cys His Val Lys His Tyr			
225	230	235	240
Thr Asn Pro Ser Gln Asp Val Thr Val Pro Cys Pro Val Pro Pro Pro			
	245	250	255
Pro Pro Cys Cys His Pro Arg Leu Ser Leu His Arg Pro Ala Leu Glu			
	260	265	270
Asp Leu Leu Leu Gly Ser Glu Ala Asn Leu Thr Cys Thr Leu Thr Gly			
	275	280	285
Leu Arg Asp Ala Ser Gly Ala Thr Phe Thr Trp Thr Pro Ser Ser Gly			
290	295	300	
Lys Ser Ala Val Gln Gly Pro Pro Glu Arg Asp Leu Cys Gly Cys Tyr			
305	310	315	320
Ser Val Ser Ser Val Leu Pro Gly Cys Ala Gln Pro Trp Asn His Gly			
	325	330	335
Glu Thr Phe Thr Cys Thr Ala Ala His Pro Glu Leu Lys Thr Pro Leu			
	340	345	350
Thr Ala Asn Ile Thr Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His			
	355	360	365
Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr			
	370	375	380
Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg			
385	390	395	400
Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp			
	405	410	415
Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr			
	420	425	430
Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe			
	435	440	445
Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys			
	450	455	460
Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val			
465	470	475	480
Val Met Ala Glu Val Asp Gly Thr Cys Tyr			
	485	490	

<210> 4233

<211> 1543

<212> PRT

<213> Homo sapiens

<400> 4233

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Met Leu Glu Thr Gly Tyr Val Ile Thr Asp Gln Thr Arg Asp Glu Met
  1             5             10            15
Ser Ile Glu Ser Phe Leu Gly Arg Ser Ser Cys Ile Ala Glu Ile His
      20             25            30
Thr Asp Leu Asp His Thr Gly Tyr Asn Glu Pro Arg Lys Asn His Ser
      35             40            45
Glu Trp Lys Ile Thr Leu Lys Glu Met Ala Gln Ile Arg Arg Lys Cys
      50             55            60
Glu Met Phe Thr Tyr Leu Arg Phe Asp Ser Glu Ile Thr Ile Val Val
      65             70            75            80
Ser Val Ala Ser Lys Gln Gly Asp Asn Gly His Val Val Ile Gln Tyr
      85             90            95
Met Tyr Val Pro Pro Gly Ala Pro Ile Pro Lys Thr Arg Asp Asp Tyr
      100            105            110
Thr Trp Gln Ser Gly Thr Asn Ala Ser Val Phe Trp Gln Gln Gly Gln
      115            120            125
Pro Tyr Pro Arg Phe Thr Ile Pro Phe Met Ser Ile Ala Ser Ala Tyr
      130            135            140
Tyr Met Phe Tyr Asp Gly Tyr Glu Asp Asp Asn Gly Thr Thr Tyr Gly
      145            150            155            160
Ala Ala Val Thr Asn Asp Met Gly Thr Leu Cys Val Arg Ile Val Thr
      165            170            175
Glu Gln Gln Lys Asn Glu Val Lys Ile Thr Ser Arg Val Tyr His Lys
      180            185            190
Ala Lys His Ile Ser Ala Trp Cys Pro Arg Pro Pro Arg Ala Val Ala
      195            200            205
Tyr Gln His Thr Tyr Ser Pro Asn Phe Val Pro Pro Thr Gly Ala Val
      210            215            220
Gln Thr His Ile Lys Phe Arg Pro Asn Val Lys Asp Val Thr Ser Val

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225	230	235	240
Met Thr Ala Gly Pro Ser Asp Leu Tyr Val His Ser Ser Asn Phe Ile			
	245	250	255
Tyr Arg Asn Leu His Leu Cys Glu Pro Glu Asn Leu Asn Asp Ser Val			
	260	265	270
Leu Ile Ser Tyr Ser Ser Asp Leu Val Ile Tyr Arg Thr Asn Thr Thr			
	275	280	285
Gly Asp Asp Ile Ile Pro Thr Cys Asp Cys Thr Leu Gly Thr Tyr Tyr			
	290	295	300
Cys Lys His Lys Asp Arg Tyr Tyr Pro Ile Ser Val Thr Lys His Gln			
305	310	315	320
Trp Tyr Glu Ile Gln Glu Ser Asp Tyr Tyr Pro Lys His Ile Gln Tyr			
	325	330	335
Asn Ile Leu Leu Gly Val Gly Pro Cys Lys Pro Gly Asp Cys Gly Gly			
	340	345	350
Lys Leu Leu Cys Lys His Gly Val Ile Gly Ile Ile Thr Ala Gly Gly			
	355	360	365
Asp Asn His Val Ala Phe Ile Asp Leu Arg Asp Phe Gln Val Ala Glu			
	370	375	380
Glu Gln Gly Ile Pro Glu Tyr Ile His Ser Leu Gly Glu Ala Phe Gly			
385	390	395	400
Ser Gly Phe Val Asp Asn Ile Lys Asp Gln Ile Gln Thr Ile Asn Pro			
	405	410	415
Ile Asn Lys Ile Ser Ser Lys Ile Val Lys Trp Val Ile Arg Ile Ile			
	420	425	430
Ser Ala Ile Thr Ile Ile Ile Arg Asn Asn Ala Asp Pro His Thr Ile			
	435	440	445
Ile Ala Thr Leu Ala Leu Leu Gly Cys Ser Gly Ser Pro Trp Arg Phe			
	450	455	460
Ile Lys Glu Lys Val Cys Gly Trp Leu Gln Leu Asn Tyr Ile His Lys			
465	470	475	480
Glu Ser Asp Gly Trp Ile Lys Lys Phe Thr Glu Met Cys Asn Ala Ala			
	485	490	495
Arg Gly Leu Glu Trp Leu Gly Asn Lys Ile Ser Lys Phe Ile Asp Trp			
	500	505	510
Leu Lys Ser Met Leu Pro Gln Ala Arg Leu Lys Val Asp Phe Ile Lys			

515	520	525
Asn Leu Lys Gln Leu Pro Leu Leu Glu Lys Gln Val Asp Gly Leu Arg		
530	535	540
Leu Ala Thr Gln Lys Gln Gln Gln Glu Tyr Ile Asp Thr Leu Thr Leu		
545	550	555
Met Leu Asp Ser Ser Asn Lys Phe Leu Pro Leu Tyr Ala Leu Glu Asn		
565	570	575
Lys Arg Ile Lys Glu Leu Leu Lys Arg Gly Gln Met Ile Leu Arg Thr		
580	585	590
Ser Lys Arg Thr Glu Pro Val Gly Val Ile Phe His Gly Glu Pro Gly		
595	600	605
Thr Gly Lys Ser Ile Thr Thr Ser Ile Leu Ala Arg Met Leu Thr Ser		
610	615	620
Glu Ser Asp Ile Tyr Ser Leu Pro Pro Ser Pro Lys Tyr Phe Asp Gly		
625	630	635
Tyr Asp Gln Gln Ser Val Val Ile Met Asp Asp Ile Met Gln Asn Pro		
645	650	655
Ser Gly Glu Asp Met Ser Leu Phe Cys Gln Met Val Ser Ser Val Pro		
660	665	670
Phe Ile Pro Pro Met Ala Asp Leu Pro Asp Lys Gly Lys Pro Phe Ser		
675	680	685
Ser Asp Tyr Val Leu Ala Ser Thr Asn His Thr Leu Leu His Pro Pro		
690	695	700
Thr Ile Thr Cys Thr Thr Ala Met Asn Arg Arg Phe Phe Leu Asp Leu		
705	710	715
Asp Ile Ile Val Lys Asp Asp Tyr Lys Leu Gly Gln Gly Lys Leu Asn		
725	730	735
Leu Gln Cys Ala Leu Lys Pro Cys Lys Glu Gly Lys Ile Gly Asn Ala		
740	745	750
Lys Cys Cys Pro Leu Ile Cys Gly Lys Ala Leu Gln Phe Arg Asp Arg		
755	760	765
Ser Asn Gly Glu His Leu Ser Leu Ala Thr Ile Tyr Asn Arg Ile Thr		
770	775	780
Gln Glu Ser Lys Asn Arg Lys Glu Leu Thr Asn Ser Leu Gln Ala Ile		
785	790	795
Phe Gln Gly Pro Ile Asp Ile Val Asn Lys Pro Pro Pro Ala Ile		

	805	810	815
Val Asp Leu Leu Lys Ser Val Arg Ser Pro Asp Val Ile Arg Tyr Cys			
	820	825	830
Glu Glu Asn Lys Trp Ile Ile Pro Ala Asp Cys Arg Leu Glu Arg Asp			
	835	840	845
Leu Asn Tyr Ala Asn Val Ile Ile Ser Met Ile Ala Asn Val Ile Ser			
	850	855	860
Ile Met Gly Val Ile Tyr Ile Ile Tyr Lys Leu Phe Cys Ser Leu Gln			
865	870	875	880
Gly Pro Tyr Ser Gly Glu Pro Lys Pro Val Thr Arg Lys Pro Glu Arg			
	885	890	895
Arg Val Val Thr Gln Gly Pro Gln Glu Glu Phe Gly Arg Ser Leu Met			
	900	905	910
Lys His Asn Thr Cys Val Val Thr Thr Asn Asn Gly Lys Phe Thr Gly			
	915	920	925
Leu Gly Ile Tyr Asp Asn Val Met Ile Ile Pro Thr His Ala Asp Ala			
	930	935	940
Gly Gln Glu Val Glu Val Asp Gly Ile Lys Thr Lys Val Ser Asp Ala			
945	950	955	960
Tyr Asp Leu Tyr Asn Thr Gln Gly Val Lys Leu Glu Ile Thr Val Leu			
	965	970	975
Lys Leu Asn Arg Asn Glu Lys Phe Arg Asp Ile Arg Lys Tyr Ile Pro			
	980	985	990
Glu Ser Glu Asp Asp Tyr Ser Glu Cys Cys Leu Ala Leu Val Ala Asn			
	995	1000	1005
Gln Val Glu Pro Thr Ile Leu Glu Val Gly Asp Cys Cys Ser Tyr Gly			
	1010	1015	1020
Asn Ile Leu Leu Ser Gly Asn Gln Thr Ala Arg Met Ile Lys Tyr Asn			
1025	1030	1035	1040
Tyr Pro Thr Lys Ser Gly Phe Cys Gly Gly Val Leu Tyr Lys Ile Gly			
	1045	1050	1055
Leu Ile Leu Gly Ile His Val Gly Gly Asn Gly Arg Asp Gly Phe Ser			
	1060	1065	1070
Ala Met Leu Leu Arg Ser Tyr Phe Asn Glu Gln Gln Gly Lys Ile Val			
	1075	1080	1085
Ser Lys Ala Asp Val Lys Glu His Asn Leu Tyr Ser Ile His Thr Pro			

1090	1095	1100
Thr Lys Thr Lys Leu Gln Pro Ser Val Phe His Asp Val Phe Pro Gly		
1105	1110	1115
Ser Lys Glu Pro Ala Val Leu Ser Thr Arg Asp Pro Arg Leu Glu Val		
1125	1130	1135
Asp Leu Asp Ser Ser Ile Phe Ser Lys Tyr Lys Gly Asn Glu Ala Val		
1140	1145	1150
Lys Ile Ser Glu Asn Met Leu Val Ala Ala Ala His Tyr Thr Ala Gln		
1155	1160	1165
Leu Thr Thr Leu Asp Ile Asp Pro Gln Pro Ile Ser Leu Glu Asp Ser		
1170	1175	1180
Val Tyr Gly Ile Glu Gly Leu Glu Ala Leu Asp Leu His Thr Ser Ala		
1185	1190	1195
Gly Tyr Pro Tyr Thr Ala His Gly Ile Lys Lys Lys Asp Leu Ile Pro		
1205	1210	1215
Lys Asp Lys Asn Leu Thr Lys Leu Lys Ile Ala Met Glu Lys Tyr Gly		
1220	1225	1230
Leu Asp Leu Pro Met Ile Thr Phe Leu Lys Asp Glu Leu Arg Lys Pro		
1235	1240	1245
Glu Lys Ile Ser Thr Gly Lys Thr Arg Ile Ile Glu Ala Ser Ser Leu		
1250	1255	1260
Asn Asp Thr Val Gln Phe Arg Met Ala Phe Gly Asn Leu Phe Ser Lys		
1265	1270	1275
Phe His Lys Asn Pro Gly Ile Val Thr Gly Ser Ala Val Gly Cys Asp		
1285	1290	1295
Pro Glu Val Phe Trp Ser Lys Ile Pro Val Met Leu Asp Gly Asp Cys		
1300	1305	1310
Leu Met Ala Phe Asp Tyr Ser Asn Tyr Asp Gly Ser Leu Asn Pro Val		
1315	1320	1325
Trp Phe Glu Leu Leu Glu Arg Val Leu Asn Asp Leu Gly Phe Pro Gly		
1330	1335	1340
Lys Leu Val Asn Lys Leu Cys His Ser Lys His Ile Tyr Lys Thr Thr		
1345	1350	1355
Tyr Tyr Glu Val Glu Gly Gly Met Pro Ser Gly Cys Ala Gly Thr Ser		
1365	1370	1375
Ile Phe Asn Ser Met Ile Asn Asn Ile Ile Ile Arg Thr Leu Val Leu		

1380 1385 1390
 Asp Thr Tyr Lys Tyr Ile Asn Leu Asp Lys Leu Lys Ile Leu Ala Tyr
 1395 1400 1405
 Gly Asp Asp Val Leu Phe Ser Tyr Pro Tyr Asp Leu Asp Met Ala Glu
 1410 1415 1420
 Leu Ala Lys Glu Gly Asn Lys Tyr Gly Leu Thr Ile Thr Pro Ala Asp
 1425 1430 1435 1440
 Lys Ser Asp Lys Phe Glu Lys Leu Asn Tyr Glu Asn Ala Thr Phe Leu
 1445 1450 1455
 Lys Arg Gly Phe Lys Gln Asp Asp Arg Tyr Lys Phe Leu Ile His Pro
 1460 1465 1470
 Ile Tyr Pro Glu Ser Glu Val Trp Glu Ser Ile Arg Trp Thr Lys Ser
 1475 1480 1485
 Pro Arg Asn Met Gln Glu His Val Leu Ser Leu Cys His Leu Met Trp
 1490 1495 1500
 His Asn Gly Lys Asp Lys Tyr Asp Ser Phe Val Asn Lys Ile Arg Ser
 1505 1510 1515 1520
 Val Ser Ala Gly Arg Ala Leu Tyr Ile Pro Pro Tyr Glu Leu Leu Leu
 1525 1530 1535
 His Glu Trp Tyr Glu Lys Phe
 1540

<210> 4234

<211> 366

<212> PRT

<213> Homo sapiens

<400> 4234

Met Gln Ser Val Gln Lys Met Phe Lys Cys His Pro Asp Glu Val Met
 1 5 10 15
 Ser Ile Arg Thr Thr Asn Arg Glu Tyr Phe Leu Ile Gly His Asp Arg
 20 25 30
 Glu Lys Ile Lys Asp Trp Val Ser Phe Met Ser Ser Phe Arg Gln Asp
 35 40 45
 Ile Lys Ala Thr Gln Gln Asn Thr Glu Glu Glu Leu Ser Leu Gly Asn

50	55	60
Lys Arg Thr Leu Phe Tyr Ser Ser Pro Leu Leu Gly Pro Ser Ser Thr		
65	70	75
Ser Glu Ala Val Gly Ser Ser Ser Pro Arg Asn Gly Leu Gln Asp Lys		
	85	90
His Leu Met Glu Gln Ser Ser Pro Gly Phe Arg Gln Thr His Leu Gln		
100	105	110
Asp Leu Ser Glu Ala Thr Gln Asp Val Lys Glu Glu Asn His Tyr Leu		
115	120	125
Thr Pro Arg Ser Val Leu Leu Glu Leu Asp Asn Ile Ile Ala Ser Ser		
130	135	140
Asp Ser Gly Glu Ser Ile Glu Thr Asp Gly Pro Asp Gln Val Ser Gly		
145	150	155
Arg Ile Glu Cys His Tyr Glu Pro Met Glu Ser Tyr Phe Phe Lys Glu		
	165	170
Thr Ser His Glu Ser Val Asp Ser Ser Lys Glu Glu Pro Gln Thr Leu		
180	185	190
Pro Glu Thr Gln Asp Gly Asp Leu His Leu Gln Glu Gln Gly Ser Gly		
195	200	205
Ile Asp Trp Cys Leu Ser Pro Ala Asp Val Glu Ala Gln Thr Thr Asn		
210	215	220
Asp Gln Lys Gly Asn Ile Pro Asp Glu Ser Gln Val Glu Lys Leu Asn		
225	230	235
Val Phe Leu Ser Pro Pro Asp Val Ile Asn Tyr Leu Ala Leu Thr Glu		
	245	250
Ala Thr Gly Arg Ile Cys Val Ser Gln Trp Glu Gly Pro Pro Arg Leu		
260	265	270
Gly Cys Ile Phe Cys His Gly Asp His Leu Leu Ala Val Asn Asp Leu		
275	280	285
Lys Pro Gln Ser Leu Glu Glu Val Ser Leu Phe Leu Thr Arg Ser Ile		
290	295	300
Gln Lys Glu Lys Leu Lys Leu Thr Ile Gly Arg Ile Pro Asn Ser Glu		
305	310	315
Thr Phe His Ala Ala Ser Cys Met Cys Pro Ser Lys Cys Gln Ser Ala		
	325	330
		335

Ala Pro Ser Gln Leu Asp Lys Pro Arg Leu Asn Arg Ala Pro Lys Arg
 340 345 350
 Ser Pro Ala Ile Lys Lys Ser Gln Gln Lys Gly Ala Arg Glu
 355 360 365

<210> 4235

<211> 213

<212> PRT

<213> Homo sapiens

<400> 4235

Met Lys Pro Pro Met Ser Trp Trp Lys Ala Tyr Leu Leu Ser Ile Ser
 1 5 10 15
 His Ala Lys Lys Ala Gly Thr Cys Ile His Phe Ser Lys Arg Glu Asn
 20 25 30
 Glu Ile Gln Arg Ser Ile Val Thr Cys Pro Lys Ser His Ser Trp His
 35 40 45
 Ser Asp Pro Asn Leu Ser Lys Ser Lys Ala Trp Val Leu Pro Leu Gln
 50 55 60
 Arg Gly Gln Pro Gln Pro Ala Phe Leu His Arg Leu Arg Gln Arg Tyr
 65 70 75 80
 Met Leu Cys Pro Leu Arg Ala Leu Leu Leu Gln Thr Tyr Phe Val Lys
 85 90 95
 Met Ala Gln Pro Gly Cys Leu Gly Asp Arg Lys Pro His Asn Gly Arg
 100 105 110
 Thr Lys Glu Gly Ala Val Gly Leu Ser Thr Ser Ile Lys Thr Asn Arg
 115 120 125
 Pro Thr Arg Ser Thr Arg Leu Pro Ser Thr Ala Asp Leu Glu Ile Lys
 130 135 140
 Ser Phe Arg Arg Ala Leu Leu Ser Leu Ser Ile Arg Tyr Lys Ile Ser
 145 150 155 160
 Ser Pro Leu Ser Cys Trp Gly Tyr Leu Asp Ser Leu Ser Phe Ser Gly
 165 170 175
 Val Pro Val Tyr Lys Thr Pro Glu Arg Ala Gln Trp Leu Thr Pro Ile
 180 185 190

Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Arg Ser Pro Glu Ala Gly
 195 200 205
 Ser Ser Arg Ser Ala
 210

<210> 4236

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4236

Met Glu Thr Trp Gly Gly Arg Lys Leu Ser Arg Asp Thr Val Pro Pro
 1 5 10 15
 Cys Ile Thr Glu Met Pro Gly Gln Ser Asp Leu Pro Gln Glu Ala Ser
 20 25 30
 Pro Ala Ala Pro Val Pro Glu Met Ser Gly Glu Arg Ala Ser Arg Glu
 35 40 45
 Ala Gly Ala Trp Ala Lys Arg Gly Ala Thr Gln Phe Phe Gln Asn Ile
 50 55 60
 Pro Val Trp Pro Met Asp Thr Gly Leu Leu Met Ser Arg Glu Gly Leu
 65 70 75 80
 Leu Ser Ser Ser Arg Thr Phe Gln Cys Gly Pro Trp Thr Pro Ala Phe
 85 90 95
 Trp Gly Pro Phe Cys Pro Val Ser Leu Gln Leu Met Ser Cys Leu Arg
 100 105 110
 Pro Glu Leu Pro Lys Ser Arg Thr Ala His Tyr Leu Leu
 115 120 125

<210> 4237

<211> 331

<212> PRT

<213> Homo sapiens

<400> 4237

Met	Ile	Arg	Lys	Asn	Asn	Tyr	Thr	Leu	Pro	Ser	Arg	Ile	Ser	Phe	Phe
1				5					10					15	
Cys	Ser	Leu	Pro	Thr	Phe	Cys	Ser	Asn	His	Ile	Asn	Lys	Ser	Cys	Phe
			20					25					30		
Phe	Phe	Ala	Val	Cys	Ile	Ala	Ser	Gly	Thr	Lys	Val	Ala	Leu	Phe	Asn
		35					40					45			
Arg	Leu	Arg	Ser	Gln	Thr	Val	Ser	Thr	Arg	Tyr	Leu	His	Val	Glu	Gly
	50					55					60				
Gly	Asn	Phe	His	Ala	Ser	Ser	Gln	Gln	Trp	Gly	Ala	Phe	Phe	Ile	His
	65				70					75				80	
Leu	Leu	Asp	Asp	Asp	Glu	Ser	Glu	Gly	Glu	Glu	Phe	Thr	Val	Arg	Asp
			85					90					95		
Gly	Tyr	Ile	His	Tyr	Gly	Gln	Thr	Val	Lys	Leu	Val	Cys	Ser	Val	Thr
		100						105					110		
Gly	Met	Ala	Leu	Pro	Arg	Leu	Ile	Ile	Arg	Lys	Val	Asp	Lys	Gln	Thr
	115						120					125			
Ala	Leu	Leu	Asp	Ala	Asp	Asp	Pro	Val	Ser	Gln	Leu	His	Lys	Cys	Ala
	130					135					140				
Phe	Tyr	Leu	Lys	Asp	Thr	Glu	Arg	Met	Tyr	Leu	Cys	Leu	Ser	Gln	Glu
	145				150				155					160	
Arg	Ile	Ile	Gln	Phe	Gln	Ala	Thr	Pro	Cys	Pro	Lys	Glu	Pro	Asn	Lys
		165						170						175	
Glu	Met	Ile	Asn	Asp	Gly	Ala	Ser	Trp	Thr	Ile	Ile	Ser	Thr	Asp	Lys
		180						185					190		
Leu	Asn	Gly	Gly	Gly	Asp	Val	Ala	Met	Leu	Glu	Leu	Thr	Gly	Gln	Asn
		195					200					205			
Phe	Thr	Pro	Asn	Leu	Arg	Val	Trp	Phe	Gly	Asp	Val	Glu	Ala	Glu	Thr
	210					215					220				
Met	Tyr	Arg	Cys	Gly	Glu	Ser	Met	Leu	Cys	Val	Val	Pro	Asp	Ile	Ser
	225				230				235					240	
Ala	Phe	Arg	Glu	Gly	Trp	Arg	Trp	Val	Arg	Gln	Pro	Val	Gln	Val	Pro
		245						250					255		
Val	Thr	Leu	Val	Arg	Asn	Asp	Gly	Ile	Ile	Tyr	Ser	Thr	Ser	Leu	Thr
		260					265					270			
Phe	Thr	Tyr	Thr	Pro	Glu	Pro	Gly	Pro	Arg	Pro	His	Cys	Ser	Ala	Ala
	275						280					285			

Gly Ala Ile Leu Arg Ala Asn Ser Ser Gln Val Pro Pro Asn Glu Ser
 290 295 300
 Asn Thr Asn Ser Glu Gly Ser Tyr Thr Asn Ala Ser Thr Asn Ser Thr
 305 310 315 320
 Ser Val Thr Ser Ser Thr Ala Thr Val Val Ser
 325 330

<210> 4238

<211> 298

<212> PRT

<213> Homo sapiens

<400> 4238

Met Leu Leu Gly Ser Val Glu Gly Gln Ala Gly Ala Arg Gln Leu Ser
 1 5 10 15
 Ser Leu Ala Asn Gly Ala Thr Glu Asp Ser Lys Gln Asp Leu Cys Ser
 20 25 30
 Arg Leu His Cys Leu Trp Val Glu Pro Arg Glu Ile Asp Asn Ile Arg
 35 40 45
 Pro Phe Arg Ala Lys Thr Asn Ala Ser Phe Ala Gly Cys Ser Leu Thr
 50 55 60
 Glu Arg Leu Leu Gly Gly Leu Cys Arg Gly Trp Met Ser Arg Gly His
 65 70 75 80
 Pro Pro Glu Pro Ala Trp Gly Pro Gly Ser Glu Ala Ile Gly Pro Val
 85 90 95

 Val Ser Arg Phe Ser Cys Arg Leu Gly Glu Arg Gly Gly Ser Arg Asn
 100 105 110
 Thr Glu Glu Val Lys Arg Gln Ser Arg Gly Asp Gly Val Pro Gln Arg
 115 120 125
 Arg Arg Ser Thr Glu Ala Glu Val Gln Ala Cys Arg His Val Asp His
 130 135 140
 Glu Tyr Ser Ala Arg Ser Val Gly Val Ser Ser Glu Leu His Gln Phe
 145 150 155 160
 Pro Gly Tyr Leu Gly Pro Trp Ile Thr Leu Arg Ser Ala Thr Cys Gln

	165		170		175
Leu Ile Ser Lys Leu Leu Leu Ala Gly Leu Arg Leu Ser Arg Glu His					
	180		185		190
Leu Gly Glu Pro Cys Ala Ala Gly Trp Thr Pro Ala His Leu Ala Asp					
	195		200		205
Tyr Ser Cys Phe Cys Ser Pro Val Cys Pro Gln Glu Val Arg Ala Cys					
	210		215		220
Leu Leu Phe Leu His Asp His Gly Arg Arg Gly Thr Asn Met Arg Val					
225		230		235	240
Leu Ala Ser Pro Gln Trp Trp Leu Pro Arg Ala Gly Glu Thr Leu Gly					
	245		250		255
Glu Gly Leu Gly Gln Gly Pro Leu Ser Leu Ala Ala Thr Ala Trp Val					
	260		265		270
Asn Cys Leu Ala Gly Leu Ala Ala Arg Ala Gln Lys Ala Glu Ala Leu					
	275		280		285
Pro Ala Phe Ser Ser His Pro Ala Pro Met					
	290		295		

<210> 4239

<211> 517

<212> PRT

<213> Homo sapiens

<400> 4239

Met Asp Leu Gly Leu Tyr Trp Val Phe Leu Val Ala Ile Leu Glu Gly			
1	5	10	15
Val Glu Cys Glu Val Gln Leu Glu Gln Ser Gly Gly Gly Leu Val Lys			
	20	25	30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Leu			
	35	40	45
Ser Pro Tyr Glu Val Asn Trp Val Arg Arg Ala Pro Gly Lys Gly Leu			
	50	55	60
Glu Trp Ile Ala Tyr Ile Ser Ser Ser Gly Ser Lys Arg Tyr Tyr Gly			
65	70	75	80
Asp Ser Val Thr Gly Arg Val Ser Ile Ser Arg Asp Ser Ala Gln Asn			

	85		90		95
Ser Val Ser Leu Gln Met Ser Gly Leu Arg Val Glu Asp Thr Gly Val					
	100		105		110
Tyr Tyr Cys Ala Arg Val Asp Trp Asn His Phe Tyr Phe Phe Met Asp					
	115		120		125
Val Trp Gly Lys Gly Thr Thr Val Ile Val Ser Ala Ala Ser Thr Lys					
	130		135		140
Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Gly					
145		150		155	160
Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro					
	165		170		175
Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr					
	180		185		190
Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val					
	195		200		205
Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Thr Cys Asn					
	210		215		220
Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Leu					
225		230		235	240
Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro Arg Cys Pro Glu					
	245		250		255
Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Glu Pro					
	260		265		270
Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Glu Pro Lys					
	275		280		285
Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Ala Pro Glu Leu					
	290		295		300
Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr					
305		310		315	320
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val					
	325		330		335
Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr Val Asp Gly Val					
	340		345		350
Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser					
	355		360		365
Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu					

370 375 380
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
 385 390 395 400
 Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro
 405 410 415
 Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln
 420 425 430
 Val Ile Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 435 440 445
 Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn Tyr Asn Thr Thr
 450 455 460
 Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 465 470 475 480
 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe Ser Cys Ser
 485 490 495
 Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln Lys Ser Leu Ser
 500 505 510
 Leu Ser Pro Gly Lys
 515

<210> 4240

<211> 426

<212> PRT

<213> Homo sapiens

<400> 4240

Met Ala Thr Glu Phe Ile Lys Ser Cys Cys Gly Gly Cys Phe Tyr Gly
 1 5 10 15
 Glu Thr Glu Lys His Asn Phe Ser Val Glu Arg Asp Phe Lys Ala Ala
 20 25 30
 Val Pro Asn Ser Gln Asn Ala Thr Ile Ser Val Pro Pro Leu Thr Ser
 35 40 45
 Val Ser Val Lys Pro Gln Leu Gly Cys Thr Glu Gly Tyr Leu Leu Ser
 50 55 60
 Lys Leu Pro Ser Asp Gly Lys Glu Val Pro Phe Val Val Pro Lys Phe

65	70	75	80
Lys Leu Ser Tyr Ile Gln Pro Arg Thr Gln Glu Thr Pro Ser His Leu			
	85	90	95
Glu Glu Leu Glu Gly Ser Ala Arg Ala Ser Phe Gly Asp Arg Lys Val			
	100	105	110
Glu Leu Ser Ser Ser Ser Gln His Gly Pro Ser Tyr Asp Val Tyr Asn			
	115	120	125
Pro Phe Tyr Met Tyr Gln His Ile Ser Pro Asp Leu Ser Arg Arg Phe			
	130	135	140
Pro Pro Arg Ser Glu Val Thr Arg Leu Tyr Gly Ser Val Cys Asp Leu			
145	150	155	160
Arg Thr Asn Lys Leu Pro Gly Ser Pro Gly Leu Ser Lys Ser Met Phe			
	165	170	175
Asp Leu Thr Asn Ser Ser Gln Arg Phe Ile Gln Arg His Asp Ser Leu			
	180	185	190
Ser Ser Val Pro Ser Ser Ser Ser Ser Arg Lys Asn Ser Gln Gly Ser			
	195	200	205
Asn Arg Ser Leu Asp Thr Ile Thr Leu Ser Gly Asp Glu Arg Asp Phe			
	210	215	220
Gly Arg Leu Asn Val Lys Leu Phe Tyr Asn Ser Ser Val Glu Gln Ile			
225	230	235	240
Trp Ile Thr Val Leu Gln Cys Arg Asp Leu Ser Trp Pro Ser Ser Tyr			
	245	250	255
Gly Asp Thr Pro Thr Val Ser Ile Lys Gly Ile Leu Thr Leu Pro Lys			
	260	265	270
Pro Val His Phe Lys Ser Ser Ala Lys Glu Gly Ser Asn Val Cys His			
	275	280	285
Ala Glu Leu Glu Leu Gly Thr Cys Phe Gln Ala Val Asn Ser Arg Ile			
	290	295	300
Gln Leu Gln Ile Leu Glu Ala Arg Tyr Leu Pro Ser Ser Ser Thr Pro			
305	310	315	320
Leu Thr Leu Ser Phe Phe Val Lys Val Gly Met Phe Ser Ser Gly Glu			
	325	330	335
Leu Ile Tyr Lys Lys Lys Thr Arg Leu Leu Lys Ala Ser Asn Gly Arg			
	340	345	350
Val Lys Trp Gly Glu Thr Met Ile Phe Pro Leu Ile Gln Ser Glu Lys			

355 360 365
 Glu Ile Val Phe Leu Ile Lys Leu Tyr Ser Arg Ser Ser Val Arg Arg
 370 375 380
 Lys His Phe Val Gly Gln Ile Trp Ile Ser Glu Asp Ser Asn Asn Ile
 385 390 395 400
 Glu Ala Val Asn Gln Trp Lys Glu Thr Val Ile Asn Pro Glu Lys Val
 405 410 415
 Val Ile Arg Trp His Lys Leu Asn Pro Ser
 420 425

<210> 4241

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4241

Met Asn Glu Arg Gln Gly Leu Ala Leu Leu Pro Arg Leu Gln Cys Ser
 1 5 10 15
 Gly Lys Ile Ser Ala His Cys Ser Leu Lys His Leu Gly Ser Ser Asp
 20 25 30
 Pro Pro Thr Phe Ala Ser Gln Val Ala Gly Thr Thr Gly Val His Gln
 35 40 45
 His Val Tyr Leu Ile Phe Val Phe Phe Val Glu Met Gly Ser His Asn
 50 55 60
 Val Val Gln Ala Gly Leu Lys His Leu Gly Ser Ser Asp Pro Pro Thr
 65 70 75 80
 Ser Ala Ser Gln Ser Ala Gly Ile Ile Gly Leu Ser His Gln Ala Thr
 85 90 95
 Arg Pro Val Cys Leu Phe Ile Tyr Leu Gln Ser Leu Thr Leu Leu Pro
 100 105 110
 Arg Leu

<210> 4242

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4242

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Met Leu Leu Ala Lys His Val Val Lys His Tyr Gly Gln Gln Met Lys
  1              5              10              15
Leu Ser Met Lys His Gln Leu Pro Lys Met Lys Thr Phe His Glu Pro
              20              25              30
Thr Thr Ile Leu Gly Asn Ser Leu Pro Lys Cys Thr Glu Ile Lys Pro
              35              40              45
Glu Val Asn Thr Leu Thr Ala Glu Asn Lys Leu Trp Asp Asp Ala Lys
              50              55              60
Asn Gly Phe Ala Arg Cys Thr Ala Ala Glu Ile Gln Arg Phe Ala Phe
              65              70              75              80
Ser Ala Thr Gly Leu Leu Ser His Val Glu Glu Gly Leu Asp Ser Asp
              85              90              95
Ala Thr Asp Ser Ser Ser Asp Asp Asp Leu Asp Glu Tyr Thr Leu Arg
              100             105             110
Lys Asn Val Ala Val
              115

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<210> 4243

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4243

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Met Gly Leu Leu Ala Phe Arg Asp Val Ala Leu Glu Phe Ser Pro Glu
  1              5              10              15
Glu Trp Glu Cys Leu Asp Pro Ala Gln Arg Ser Leu Tyr Arg Asp Val
              20              25              30
Met Leu Glu Asn Tyr Arg Asn Leu Ile Ser Leu Gly Leu Ala Met Ser
              35              40              45
Lys Pro Glu Leu Ile Ile Cys Leu Glu Ala Arg Lys Glu Pro Trp Asn

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50 55 60
 Val Asn Thr Glu Lys Thr Ala Lys His Ser Val Ala Thr Arg Phe Arg
 65 70 75 80
 His Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Pro Pro
 85 90 95
 Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Thr Gly His His Cys
 100 105 110
 Gln Pro Ile Cys Val Phe
 115

<210> 4244

<211> 251

<212> PRT

<213> Homo sapiens

<400> 4244

Met Ser Gly Ser Asn Pro Lys Ala Ala Ala Ala Ala Ser Ala Ala Gly
 1 5 10 15
 Pro Gly Gly Leu Val Ala Gly Lys Glu Glu Lys Lys Lys Ala Gly Gly
 20 25 30
 Gly Val Leu Asn Arg Leu Lys Ala Arg Arg Gln Ala Pro His His Ala
 35 40 45
 Ala Asp Asp Gly Val Gly Ala Ala Val Thr Glu Gln Glu Leu Leu Ala
 50 55 60
 Leu Asp Thr Ile Arg Pro Glu His Val Leu Arg Leu Ser Trp Val Thr
 65 70 75 80
 Glu Asn Tyr Leu Cys Lys Pro Glu Asp Asn Ile Tyr Ser Ile Asp Phe
 85 90 95
 Thr Arg Phe Lys Ile Arg Asp Leu Glu Thr Gly Thr Val Leu Phe Glu
 100 105 110
 Ile Ala Lys Pro Cys Val Ser Asp Gln Glu Glu Asp Glu Glu Glu Gly
 115 120 125
 Gly Gly Asp Val Asp Ile Ser Ala Gly Arg Phe Val Arg Tyr Gln Phe
 130 135 140

Thr Pro Ala Phe Leu Arg Leu Arg Thr Val Gly Ala Thr Val Glu Phe
 145 150 155 160
 Thr Val Gly Asp Lys Pro Val Ser Asn Phe Arg Met Ile Glu Arg His
 165 170 175
 Tyr Phe Arg Glu His Leu Leu Lys Asn Phe Asp Phe Asp Phe Gly Phe
 180 185 190
 Cys Ile Pro Ser Ser Arg Asn Thr Cys Glu His Ile Tyr Glu Phe Pro
 195 200 205
 Gln Leu Ser Glu Asp Val Ile Arg Leu Met Ile Glu Asn Pro Tyr Glu
 210 215 220
 Thr Arg Ser Asp Ser Phe Tyr Phe Val Asp Asn Lys Leu Ile Met His
 225 230 235 240
 Asn Lys Ala Asp Tyr Ala Tyr Asn Gly Gly Gln
 245 250

<210> 4245

<211> 139

<212> PRT

<213> Homo sapiens

<400> 4245

Met Glu Phe Ala Val Phe Cys Leu Arg Arg Arg Arg Met Gly Arg Gln
 1 5 10 15
 Val Ser Cys Pro Val Gly Leu Gly Val Ile Val Gly Val Thr Leu His
 20 25 30
 Leu Asn Leu Ser Ala Leu Pro Ser Ser Ser Ser Ala Ser Ala Trp Ser
 35 40 45
 Glu Thr Leu Ser Leu Trp Lys Val Thr Pro Gly Arg Ile His Leu Leu
 50 55 60
 Ser Cys Phe His His Gly Ile Leu Ala Cys Ala Gly Val Ser Pro Ser
 65 70 75 80
 Ser Ser Ser Cys Ala Leu Arg Ile His Cys Cys Trp Tyr Ala Leu Ser
 85 90 95
 Ser Ala Leu Glu Leu Ala Gln Val Pro Leu Asp Ile His Thr Thr Asn
 100 105 110

Ser Leu Ala Leu Gln Arg Trp Thr Arg Cys Leu Phe Asn Ser Leu Tyr
 115 120 125
 Cys His Phe His Pro Ser Glu Ala Phe Cys Ser
 130 135

<210> 4246
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 4246
 Met Asp Lys Lys Ile Ser Ile Leu Lys Asp His Gly Tyr Ile Glu Asn
 1 5 10 15
 Leu Thr Phe Gly Trp Asp Gly Pro Ser Trp Arg Leu Leu Thr Ala Leu
 20 25 30
 Lys Leu Leu Cys Leu Glu Ala Glu Lys Phe Thr Cys Trp Lys Lys Val
 35 40 45
 Leu Leu Gly Glu Val Ile Ser Asp Thr Asn Glu Lys Thr Ser Leu Asp
 50 55 60
 Ile Ala Gln Lys Ile Cys Tyr Tyr Phe Ile Glu Glu Thr Asn Ala Val
 65 70 75 80
 Leu Gln Lys Val Ser His Met Lys Asp Glu Lys Glu Ala Leu Ile Asn
 85 90 95
 Gln Leu Thr Leu Val Glu Ser Leu Trp Thr Glu Glu Leu Lys Ile Leu
 100 105 110
 Arg Ala Ser Ala Glu Thr Leu His Ser Leu Gln Thr Ala Phe Thr
 115 120 125

<210> 4247
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 4247

Met Arg Gln Leu Leu Ser Gln Pro Arg Ser Lys Thr Met Cys Leu Lys
 1 5 10 15
 Cys Asp Leu Gln Glu Arg Leu Leu Cys Pro Ser Leu Leu Ala Gly Thr
 20 25 30
 Ala Asp Gly Ser Leu Arg Met Asp Asp Pro Lys Gly Asp Phe Ile Thr
 35 40 45
 Leu Tyr Gln Met Ala Ser Gln Ser Ser Ala Ser His Tyr Lys Leu Gln
 50 55 60
 Val Ile Lys Ala Leu Lys Ser Ser Gly Leu Cys Glu Ser Leu Thr Tyr
 65 70 75 80
 Gly Leu Pro Phe Ile Leu Arg Pro Thr Ser Cys Trp Gln Leu Asp Trp
 85 90 95
 Asp Glu Leu Glu Thr Asn Gln Gln His Phe His Ala Leu Cys His Ser
 100 105 110
 Leu Leu Lys Arg Glu Trp Leu Leu Leu Ala Lys Gly Glu Pro Pro Gly
 115 120 125
 Pro Gly His Ser Gln Arg Ile Pro Ala Ser Thr Phe Tyr Val Ile Met
 130 135 140
 Pro Ser His Ser Leu Thr Leu Leu Val Lys Ala Val Ala Thr Arg Glu
 145 150 155 160
 Leu Met Leu Pro Ser Thr Phe Pro Leu Leu Pro Glu Asp Pro His Asp
 165 170 175
 Asp Ser Leu Lys Asn Val Glu Ser Met Leu Asp Ser Leu Glu Leu Glu
 180 185 190
 Pro Thr Tyr Asn Pro Leu His Val Gln Ser His Leu Tyr Ser His Leu
 195 200 205
 Ser Ser Ile Tyr Ala Lys Pro Gln Gly Arg Leu His Pro His Trp Glu
 210 215 220
 Ser Arg Ala Pro Arg Lys Thr Gly Gln Leu Gln Thr Asn Arg Ala Arg
 225 230 235 240
 Ala Thr Val Ala Pro Leu Pro Met Thr Pro Val Pro Gly Arg Ala Ser
 245 250 255
 Lys Met Pro Ala Ala Ser Lys Ser Ser Ser Asp Ala Phe Phe Leu Pro
 260 265 270
 Ser Glu Trp Glu Lys Asp Pro Ser Arg Pro
 275 280

<210> 4248

<211> 391

<212> PRT

<213> Homo sapiens

<400> 4248

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Met Gly Leu Tyr Ala Ala Ala Ala Gly Val Leu Ala Gly Val Glu Ser
  1             5             10             15
Arg Gln Gly Ser Ile Lys Gly Leu Val Tyr Ser Ser Asn Phe Gln Asn
      20             25             30
Val Lys Gln Leu Tyr Ala Leu Val Cys Glu Thr Gln Arg Tyr Ser Ala
      35             40             45
Val Leu Asp Ala Val Ile Ala Ser Ala Gly Leu Leu Arg Ala Glu Lys
      50             55             60
Lys Leu Arg Pro His Leu Ala Lys Val His Arg Gly Val Ser Arg Asn
      65             70             75             80
Glu Asp Leu Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu
      85             90             95
Pro Arg Phe Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp Val
      100            105            110
Val Asp Tyr Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala Ser
      115            120            125
Ser Leu Asp Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu Asp
      130            135            140
Pro Leu Met Pro Glu Leu Leu Val Phe Pro Ala Gln Thr Asp Leu His
      145            150            155            160
Glu His Pro Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala
      165            170            175
Ser Cys Leu Pro Ala Met Leu Leu Asp Pro Pro Pro Gly Ser His Val
      180            185            190
Ile Asp Ala Cys Ala Ala Pro Gly Asn Lys Thr Ser His Leu Ala Ala
      195            200            205
Leu Leu Lys Asn Gln Gly Lys Ile Phe Ala Phe Asp Leu Asp Ala Lys
      210            215            220

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Arg Leu Ala Ser Met Ala Thr Leu Leu Ala Arg Ala Gly Val Ser Cys
 225 230 235 240
 Cys Glu Leu Ala Glu Glu Asp Phe Leu Ala Val Ser Pro Ser Asp Pro
 245 250 255
 Arg Tyr His Glu Val His Tyr Ile Leu Leu Asp Pro Ser Cys Ser Gly
 260 265 270
 Ser Gly Met Pro Ser Arg Gln Leu Glu Glu Pro Gly Ala Gly Thr Pro
 275 280 285
 Ser Pro Val Arg Leu His Ala Leu Ala Gly Phe Gln Gln Arg Ala Leu
 290 295 300
 Cys His Ala Leu Thr Phe Pro Ser Leu Gln Arg Leu Val Tyr Ser Thr
 305 310 315 320
 Cys Ser Leu Cys Gln Glu Glu Asn Glu Asp Val Val Arg Asp Ala Leu
 325 330 335
 Gln Gln Asn Pro Gly Ala Phe Arg Leu Ala Pro Ala Leu Pro Ala Trp
 340 345 350
 Pro His Arg Gly Leu Ser Thr Phe Pro Gly Ala Glu His Cys Leu Arg
 355 360 365
 Ala Ser Pro Glu Thr Thr Leu Ser Ser Gly Phe Phe Val Ala Val Ile
 370 375 380
 Glu Arg Ala Glu Val Pro Arg
 385 390

<210> 4249

<211> 507

<212> PRT

<213> Homo sapiens

<400> 4249

Met Glu Phe Leu Leu Gly Asn Pro Phe Ser Thr Pro Val Gly Gln Cys
 1 5 10 15
 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20 25 30
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35 40 45

Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50 55 60
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65 70 75 80
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85 90 95
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100 105 110
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115 120 125
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130 135 140
 Lys Arg Lys Gly Val Glu Phe Pro Met Ala Asp Leu Asp Ala Leu Ser
 145 150 155 160
 Pro Ile His Thr Pro Gln Arg Ser Val Pro Glu Val Asp Pro Ala Ala
 165 170 175
 Thr Met Pro Arg Ser Gln Ser Gln Gln Arg Thr Ser Ala Gly Ser Tyr
 180 185 190
 Ser Ser Pro Pro Pro Ala Pro Tyr Ser Ala Pro Gln Ala Pro Ala Leu
 195 200 205
 Ser Val Thr Gly Pro Ile Thr Ala Asn Ser Glu Gln Ile Ala Arg Leu
 210 215 220
 Arg Ser Glu Leu Asp Val Val Arg Gly Asn Thr Lys Val Met Ser Glu
 225 230 235 240
 Met Leu Thr Glu Met Val Pro Gly Gln Glu Asp Ser Ser Asp Leu Glu
 245 250 255
 Leu Leu Gln Glu Leu Asn Arg Thr Cys Arg Ala Met Gln Gln Arg Ile
 260 265 270
 Val Glu Leu Ile Ser Arg Val Ser Asn Glu Glu Val Thr Glu Glu Leu
 275 280 285
 Leu His Val Asn Asp Asp Leu Asn Asn Val Phe Leu Arg Tyr Glu Arg
 290 295 300
 Phe Glu Arg Tyr Arg Ser Gly Arg Ser Val Gln Asn Ala Ser Asn Gly
 305 310 315 320
 Val Leu Asn Glu Val Thr Glu Asp Asn Leu Ile Asp Leu Gly Pro Gly
 325 330 335

Ser Pro Ala Val Val Ser Pro Met Val Gly Asn Thr Ala Pro Pro Ser
 340 345 350
 Ser Leu Ser Ser Gln Leu Ala Gly Leu Asp Leu Gly Thr Glu Ser Val
 355 360 365

 Ser Gly Thr Leu Ser Ser Leu Gln Gln Cys Asn Pro Arg Asp Gly Phe
 370 375 380
 Asp Met Phe Ala Gln Thr Arg Gly Asn Ser Leu Ala Glu Gln Arg Lys
 385 390 395 400
 Thr Val Thr Tyr Glu Asp Pro Gln Ala Val Gly Gly Leu Ala Ser Ala
 405 410 415
 Leu Asp Asn Arg Lys Gln Ser Ser Glu Gly Ile Pro Val Ala Gln Pro
 420 425 430
 Ser Val Met Asp Asp Ile Glu Val Trp Leu Arg Thr Asp Leu Lys Gly
 435 440 445
 Asp Asp Leu Glu Glu Gly Val Thr Ser Glu Glu Phe Asp Lys Phe Leu
 450 455 460
 Glu Glu Arg Ala Lys Ala Ala Glu Met Val Pro Asp Leu Pro Ser Pro
 465 470 475 480
 Pro Met Glu Ala Pro Ala Pro Ala Ser Asn Pro Ser Gly Arg Lys Lys
 485 490 495
 Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala Leu
 500 505

<210> 4250

<211> 150

<212> PRT

<213> Homo sapiens

<400> 4250

Met Glu Val Ser Tyr Thr Pro Leu Thr Val Phe Ser Ser Ser Val Val
 1 5 10 15
 Thr Lys Pro Tyr Pro Ser Leu Ser Ile Arg Ser Thr Ile Phe Pro Ser
 20 25 30
 Leu Ser Ser Leu Ser Ser Gly Val Ser Ser Ser Lys Phe Leu Glu Ser

35	40	45
Phe Leu Pro Arg Lys Ala Ser Trp Ser Tyr Trp Lys Leu Trp Leu Ser		
50	55	60
Ser Gly Gly Arg Ser Pro Ser Ser Glu Ser Gly Arg Thr Thr Arg Ser		
65	70	75
Leu Arg Thr Val Gly Leu Ala Arg Arg Thr Arg Gly Ala Ser Thr Ser		
85	90	95
Ala Ser Ser Ser Pro Arg Ala Asn Pro Gly Gly His Arg Ala Pro Ser		
100	105	110
Ser Arg Gly Glu Gly Gly Arg Glu Gly Asp Ala Glu Arg Ala Thr Thr		
115	120	125
Ala Ala Ala Arg Glu Trp Gly Leu Gly Ala Arg Arg Pro Ser Phe Met		
130	135	140
Leu Cys Ile Phe Tyr Lys		
145	150	

<210> 4251

<211> 716

<212> PRT

<213> Homo sapiens

<400> 4251

Met Leu Lys Asp Tyr Leu Val Val Ala Gln Glu Ala Leu Ser Ala Gln		
1	5	10
Lys Glu Ile Tyr Gln Val Lys Gln Gln Arg Leu Glu Leu Ala Gln Gln		
20	25	30
Glu Tyr Gln Gln Leu His Ala Val Trp Glu His Lys Leu Gly Ser Gln		
35	40	45
Val Ser Leu Val Ser Gly Ser Ser Ser Ser Ser Lys Tyr Asp Pro Glu		
50	55	60
Ile Leu Lys Ala Glu Ile Ala Thr Ala Lys Ser Arg Val Asn Lys Leu		
65	70	75
Lys Arg Glu Met Val His Leu Gln His Glu Leu Gln Phe Lys Glu Arg		
85	90	95
Gly Phe Gln Thr Leu Lys Lys Ile Asp Lys Lys Met Ser Asp Ala Gln		

100	105	110
Gly Ser Tyr Lys Leu Asp Glu Ala Gln Ala Val Leu Arg Glu Thr Lys		
115	120	125
Ala Ile Lys Lys Ala Ile Thr Cys Gly Glu Lys Glu Lys Gln Asp Leu		
130	135	140
Ile Lys Ser Leu Ala Met Leu Lys Asp Gly Phe Arg Thr Asp Arg Gly		
145	150	155
Ser His Ser Asp Leu Trp Ser Ser Ser Ser Ser Leu Glu Ser Ser Ser		
165	170	175
Phe Pro Leu Pro Lys Gln Tyr Leu Asp Val Ser Ser Gln Thr Asp Ile		
180	185	190
Ser Gly Ser Phe Gly Ile Asn Ser Asn Asn Gln Leu Ala Glu Lys Val		
195	200	205
Arg Leu Arg Leu Arg Tyr Glu Glu Ala Lys Arg Arg Ile Ala Asn Leu		
210	215	220
Lys Ile Gln Leu Ala Lys Leu Asp Ser Glu Ala Trp Pro Gly Val Leu		
225	230	235
Asp Ser Glu Arg Asp Arg Leu Ile Leu Ile Asn Glu Lys Glu Glu Leu		
245	250	255
Leu Lys Glu Met Arg Phe Ile Ser Pro Arg Lys Trp Thr Gln Gly Glu		
260	265	270
Val Glu Gln Leu Glu Met Ala Arg Lys Arg Leu Glu Lys Asp Leu Gln		
275	280	285
Ala Ala Arg Asp Thr Gln Ser Lys Ala Leu Thr Glu Arg Leu Lys Leu		
290	295	300
Asn Ser Lys Arg Asn Gln Leu Val Arg Glu Leu Glu Glu Ala Thr Arg		
305	310	315
Gln Val Ala Thr Leu His Ser Gln Leu Lys Ser Leu Ser Ser Ser Met		
325	330	335
Gln Ser Leu Ser Ser Gly Ser Ser Pro Gly Ser Leu Thr Ser Ser Arg		
340	345	350
Gly Ser Leu Val Ala Ser Ser Leu Asp Ser Ser Thr Ser Ala Ser Phe		
355	360	365
Thr Asp Leu Tyr Tyr Asp Pro Phe Glu Gln Leu Asp Ser Glu Leu Gln		
370	375	380
Ser Lys Val Glu Phe Leu Leu Leu Glu Gly Ala Thr Gly Phe Arg Pro		

385		390		395		400
Ser Gly Cys Ile Thr	Thr Thr Ile His Glu Asp Glu Val	Ala Lys Thr Gln				
	405		410		415	
Lys Ala Glu Gly Gly Gly Arg Leu Gln Ala Leu Arg Ser Leu Ser Gly						
	420		425		430	
Thr Pro Lys Ser Met Thr Ser Leu Ser Pro Arg Ser Ser Leu Ser Ser						
	435		440		445	
Pro Ser Pro Pro Cys Ser Pro Leu Met Ala Asp Pro Leu Leu Ala Gly						
	450		455		460	
Asp Ala Phe Leu Asn Ser Leu Glu Phe Glu Asp Pro Glu Leu Ser Ala						
465		470		475		480
Thr Leu Cys Glu Leu Ser Leu Gly Asn Ser Ala Gln Glu Arg Tyr Arg						
	485		490		495	
Leu Glu Glu Pro Gly Thr Glu Gly Lys Gln Leu Gly Gln Ala Val Ser						
	500		505		510	
Thr Ala Gln Gly Cys Gly Leu Lys Val Ala Cys Val Ser Ala Ala Val						
	515		520		525	
Ser Asp Glu Ser Val Ala Gly Asp Ser Gly Val Tyr Glu Ala Ser Val						
	530		535		540	
Gln Arg Leu Gly Ala Ser Glu Ala Ala Ala Phe Asp Ser Asp Glu Ser						
545		550		555		560
Glu Ala Val Gly Ala Thr Arg Ile Gln Ile Ala Leu Lys Tyr Asp Glu						
	565		570		575	
Lys Asn Lys Gln Phe Ala Ile Leu Ile Ile Gln Leu Ser Asn Leu Ser						
	580		585		590	
Ala Leu Leu Gln Gln Gln Asp Gln Lys Val Asn Ile Arg Val Ala Val						
	595		600		605	
Leu Pro Cys Ser Glu Ser Thr Thr Cys Leu Phe Arg Thr Arg Pro Leu						
	610		615		620	
Asp Ala Ser Asp Thr Leu Val Phe Asn Glu Val Phe Trp Val Ser Met						
625		630		635		640
Ser Tyr Pro Ala Leu His Gln Lys Thr Leu Arg Val Asp Val Cys Thr						
	645		650		655	
Thr Asp Arg Ser His Leu Glu Glu Cys Leu Gly Gly Ala Gln Ile Ser						
	660		665		670	
Leu Ala Glu Val Cys Arg Ser Gly Glu Arg Ser Thr Arg Trp Tyr Asn						

675	680	685
Leu Leu Ser Tyr Lys Tyr Leu Lys Lys Gln Ser Arg Met Phe Ser Pro		
690	695	700
Arg Lys Pro His Leu Ile Trp Met Gly Thr Gln His		
705	710	715

<210> 4252

<211> 286

<212> PRT

<213> Homo sapiens

<400> 4252

Met Glu Asp Arg His Val Ser Leu Pro Ser Phe Asn Gln Leu Phe Gly		
1	5	10
Leu Ser Asp Pro Val Asn Arg Ala Tyr Phe Ala Val Phe Asp Gly His		
20	25	30
Gly Gly Val Asp Ala Ala Arg Tyr Ala Ala Val His Val His Thr Asn		
35	40	45
Ala Ala Arg Gln Pro Glu Leu Pro Thr Asp Pro Glu Gly Ala Leu Arg		
50	55	60
Glu Ala Phe Arg Arg Thr Asp Gln Met Phe Leu Arg Lys Ala Lys Arg		
65	70	75
Glu Arg Leu Gln Ser Gly Thr Thr Gly Val Cys Ala Leu Ile Ala Gly		
85	90	95
Ala Thr Leu His Val Ala Trp Leu Gly Asp Ser Gln Val Ile Leu Val		
100	105	110
Gln Gln Gly Gln Val Val Lys Leu Met Glu Pro His Arg Pro Glu Arg		
115	120	125
Gln Asp Glu Lys Ala Arg Ile Glu Ala Leu Gly Gly Phe Val Ser His		
130	135	140
Met Asp Cys Trp Arg Val Asn Gly Thr Leu Ala Val Ser Arg Ala Ile		
145	150	155
Gly Asp Val Phe Gln Lys Pro Tyr Val Ser Gly Glu Ala Asp Ala Ala		
165	170	175
Ser Arg Ala Leu Thr Gly Ser Glu Asp Tyr Leu Leu Leu Ala Cys Asp		

	180		185		190
Gly	Phe	Phe	Asp	Val	Val
	195		200		205
Ser	His	Leu	Thr	Arg	Gln
	210		215		220
Leu	Val	Ala	Ala	Ala	Arg
	225		230		235
Met	Val	Val	Phe	Leu	Arg
		245		250	
Gln	Gly	Glu	Gly	Asp	Pro
	260		265		270
Ser	Ser	Leu	Pro	Glu	Pro
	275		280		285

<210> 4253

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4253

Met	Pro	His	Pro	Val	Pro	Met	Ile	Thr	Pro	Ser	Pro	Val	Pro	Phe	Thr
1			5					10					15		
Ala	Lys	Leu	Leu	Glu	Ser	Ser	Phe	Cys	Thr	Ser	Cys	Leu	Leu	Phe	Leu
		20					25					30			
Cys	Ser	His	Pro	Cys	Ser	Ser	Pro	Phe	Gln	Ala	Gly	Ser	His	Pro	Asp
		35					40					45			
Cys	Leu	Thr	Glu	Thr	Val	Leu	Cys	Arg	Ser	Pro	Ala	Lys	Ser	Leu	Leu
	50					55				60					
Pro	Pro	Pro	Ala	Ala	Ser	Phe	Cys	Pro	His	Pro	Leu	Gly	Pro	Val	Ser
	65				70				75					80	
Ser	Ile	Arg	Gly	Asn	Arg	Gln	His	Leu	Leu	Ser	Cys	Ser	Pro	Val	Met
			85				90						95		
Ala	Gly	His	Val	Val	Leu	Gly	Arg	Leu	Ala	Trp					
		100					105								

<210> 4254

<211> 229

<212> PRT

<213> Homo sapiens

<400> 4254

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Met Gly Pro Glu Gln Ile Leu Pro Thr Gly Ser Glu His Val Leu Pro
 1             5             10             15
Thr Gly Ser Glu Gln Ile Leu Pro Thr Gly Ser Glu Gln Ile Leu Pro
      20             25             30
Met Gly Ser Glu Gln Ile Leu Pro Met Pro Ser Glu Gln Val Leu Pro
      35             40             45
Met Gly Ser Glu His Val Leu Pro Thr Gly Ser Glu Gln Val Leu Pro
      50             55             60
Thr Gly Ser Glu Gln Val Leu Pro Thr Gly Ser Glu His Val Leu Pro
      65             70             75             80
Thr Gly Ser Glu Gln Val Leu Leu Pro Thr Gly Ser Asp His Val Leu
      85             90             95
Pro Thr Gly Ser Glu His Val Leu Ser Thr Gly Ser Glu Gln Val Leu
      100            105            110
Pro Met Gly Ser Glu His Val Leu Pro Thr Gly Ser Glu Gln Val Leu
      115            120            125
Pro Thr Gly Ser Met Ser Ser Pro Arg Gly Leu Ser Met Ser Ser Pro
      130            135            140
Trp Val Leu Ser Lys Ser Ser Pro Trp Gly Leu Ser Lys Ser Ser Pro
      145            150            155            160
Arg Gly Leu Ser Lys Ser Ser Pro Trp Gly Leu Ser Lys Ser Phe Leu
      165            170            175
Cys Arg Leu Ser Thr Ser Ser Pro Ser Cys Asp Arg Val Ser Leu Leu
      180            185            190
Gln Val Glu Asp Val Ala Arg Met His Leu Glu Gly Thr Pro Ala Ser
      195            200            205
Pro Glu Arg Pro Leu Leu Val Ala Trp Gly Val Ala Gly Trp Ser Gly
      210            215            220
Val Leu Gly Ala Leu

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225

<210> 4255

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4255

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Met Gly Gln Asp Arg Ala Gly Ile Ala Val Thr Gly Trp Trp Lys Ile
  1             5             10             15
Leu Gln Lys His Leu Phe Cys Leu Glu Gly Pro Asn Ser Phe Lys Asn
      20             25             30
Met Cys Leu Ala Lys Ala His Ile Ser Gln Asn Leu Cys Lys Tyr Leu
      35             40             45
Glu Ala Phe Leu Leu Phe Tyr Val Asp Val Glu Ala Lys Glu Arg Lys
      50             55             60
Met Trp Pro His Val Cys Phe Gln Leu Leu Ile Ser Lys Tyr Leu Ala
      65             70             75             80
Phe Ser Gly Met Arg Thr Asn Gln Ile Thr Phe Val Arg Tyr Ala Val
      85             90             95
Pro Leu Asp Cys Ser Leu Ser Phe Gly
      100             105

```

<210> 4256

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4256

```

Met Leu Phe Arg Ser Leu Pro Gly Asn Phe Asp Met Val His Val Phe
  1             5             10             15
Thr Gln Asn Pro Ile Lys Gln Gly Ser Leu Ala Val Gln Phe Pro Pro
      20             25             30
Val Leu Leu Ser Gly Trp Ile Gly Glu Gly Gly His Pro Ser Gln Leu

```


35	40	45
Ser Ala Ser Thr Gln Pro Leu Trp Ala Met Trp Trp Gln Lys Gln Lys		
50	55	60
Ala Arg Gln Ala Pro Trp Glu Pro Gly Thr Leu Asp His Glu Ala Leu		
65	70	75
His Leu Ser Glu Leu Gly Phe Pro Ser Phe Lys Lys Ile Phe Arg Arg		
85	90	95
Gly Val Val Ala His Thr Cys Asn Pro Ser Thr Leu Gly Gly		
100	105	110

<210> 4257

<211> 278

<212> PRT

<213> Homo sapiens

<400> 4257

Met Thr Asp Leu Asn Lys His Ile Lys Gln Ala Gln Thr Gln Arg Lys		
1	5	10
Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val		
20	25	30
Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu		
35	40	45
Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys		
50	55	60
Ser Gly Glu Ile Glu Arg Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala		
65	70	75
Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile		
85	90	95
Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile		
100	105	110
Leu Lys Glu Lys Gln Glu Lys Glu Ile Gln Thr Leu Gln Glu Glu Thr		
115	120	125
Lys Lys Val Gln Ala Glu Thr Ala Ser Lys Thr Arg Glu Val Gln Ala		
130	135	140
Gln Leu Leu Gln Glu Lys Arg Leu Leu Glu Lys Gln Leu Ser Glu Pro		

145 150 155 160
 Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg Arg Glu Leu Asn Met Lys
 165 170 175
 Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg Phe Ile Phe Glu Tyr Ser
 180 185 190
 Cys Gly Ile Asn Arg Glu Asn Gln Gln Phe Lys Lys Glu Leu Leu Gln
 195 200 205
 Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala Thr Gln Ser His Leu Glu
 210 215 220
 Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln Trp Tyr Leu Glu Ser Leu
 225 230 235 240
 Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser His Asn Gln Cys Leu Asn
 245 250 255
 Arg Gln Asp Val Pro Lys Thr Thr Pro Ser Leu Pro Gln Gly Thr Lys
 260 265 270
 Ser Arg Ile Asn Pro Lys
 275

<210> 4258

<211> 327

<212> PRT

<213> Homo sapiens

<400> 4258

Met Ser Leu Met Thr Arg Glu Asn Leu Ala Phe Arg Gly Ser Leu Met
 1 5 10 15
 Gly Cys Ser Glu Leu Lys Pro Phe Gln Glu Leu Thr His Gln Ser Ala
 20 25 30
 Val Ser His Ser Arg Ala Asp Val Ala Asp Val Trp Trp Tyr Cys Gly
 35 40 45
 Gly Pro Leu Leu Asp Thr Leu Pro Ser Asn Trp Ser Gly Thr Cys Thr
 50 55 60
 Leu Val Gln Phe Ala Ile Pro Phe Ala Leu Ala Phe Leu Gln Pro Glu
 65 70 75 80
 Lys Glu Lys Pro Gln His Arg Lys Ile Arg Glu Ala Pro Tyr Gly Ser

	85		90		95
Phe Asp Ser Gln Val Tyr Leu Asp Ala Thr Gly Val Pro Gln Gly Val					
	100		105		110
Pro His Lys Phe Lys Ala Gln Asp Gln Ile Ala Ala Gly Phe Glu Ser					
	115		120		125
Ile Phe Trp Trp Val Thr Ile Ser Lys Asn Ile Asp Trp Ile Asn Tyr					
	130		135		140
Ile Tyr Tyr Asn Gln Gln Arg Phe Ile Asn Tyr Thr Arg Asp Ala Val					
145		150		155	160
Lys Gly Ile Ala Glu Gln Leu Gly Pro Thr Ser Gln Met Ala Trp Glu					
	165		170		175
Asn Arg Met Ala Leu Asp Met Ile Leu Ala Lys Lys Gly Gly Val Cys					
	180		185		190
Val Met Ile Lys Thr Gln Cys Cys Thr Phe Ile Pro Asn Asn Thr Ala					
	195		200		205
Pro Ser Gly Ser Ile Thr Arg Ala Leu Gln Gly Leu Thr Ala Leu Ser					
	210		215		220
Asn Glu Leu Ala Lys Asn Ser Gly Val Asn Asp Pro Phe Ser Gly Trp					
225		230		235	240
Leu Glu Arg Trp Phe Gly Lys Trp Lys Gly Ile Ile Ala Ser Ile Leu					
	245		250		255
Thr Ser Leu Ala Ala Val Ile Gly Val Val Ile Leu Phe Gly Cys Cys					
	260		265		270
Val Thr Pro Cys Ile Arg Gly Leu Val Gln Arg Leu Ile Glu Thr Val					
	275		280		285
Leu Thr Lys Thr Ser Leu Ser Ser Pro Pro Pro Tyr Ser Asp Lys Leu					
	290		295		300
Phe Leu Leu Glu Asp Gln Val Glu Gln Gln Ser Gln Asp Leu Leu Lys					
305		310		315	320
Arg Phe Glu Glu Glu Gly Pro					
	325				

<210> 4259

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4259

Met Phe Leu Pro Arg Glu Val Leu Leu Arg Leu Trp Val Gln Ile Ala
 1 5 10 15
 Ile Leu Gly Cys Arg Tyr Ile Pro Gly Asp Ser Val Pro Ser Leu Met
 20 25 30
 Val Ala Gln His Arg Pro Ala Arg Val Ala Ser Ala Ser Trp Ser Arg
 35 40 45
 Ala Ala Arg Gly Gln Ala Trp Trp Leu Ala Pro Met Ile Pro Thr Leu
 50 55 60
 Trp Glu Thr Glu Val Gly Arg Ser Leu Glu Pro Arg Ser Ser Arg Pro
 65 70 75 80
 Thr Trp Ala Ala Trp Gln Lys Pro Ser Leu Gln Lys Ile Gln Asn Ser
 85 90 95
 Pro Gly His Gly Gly Ala Phe Leu Trp Ser Gln Pro Lys Leu Ala Gly
 100 105 110
 His Gly Gly Val Cys Leu
 115

<210> 4260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 4260

Met Gly Gly Ala Gly Gly Gln His Gly Thr Asp Leu His Pro Ala Leu
 1 5 10 15
 Gln Thr Gly Thr Thr Ala Arg Pro Cys Cys Trp Met Val Ser Ser Val
 20 25 30
 Trp Ala Pro Ser Trp Asn Thr Thr Gln Ser Thr Ala Thr Gly Thr Ala
 35 40 45
 Leu Thr Glu Ala Arg Gly Pro Ala Cys Pro Gly Pro Leu Ser Leu Lys
 50 55 60

Pro Arg Leu Val Pro Pro Thr Cys Cys Val Met Val Trp Leu Pro Arg
 65 70 75 80
 Pro Ser Leu Gly Trp Val Trp Gly Trp Ser Gly Leu Ala His Ala Ser
 85 90 95
 His Leu Cys Leu His Leu Cys Cys His Pro Ala Pro Pro Ser Ser Ser
 100 105 110
 Ser Pro Ala Ser Ser Ser Leu Cys Ala Ser Val Ser Cys Arg Lys Lys
 115 120 125
 Trp Val Glu Pro Glu Arg Arg Leu Ser Glu Glu Gly Arg Gly Arg Ala
 130 135 140
 Trp Gly Gly Ser Pro Thr Pro His Pro Lys Pro Gln Gly Leu Pro Pro
 145 150 155 160
 Gly Ser Gly Arg Gly Arg Ser Trp Leu Cys Gly Val Val Ala Pro Leu
 165 170 175
 Leu Leu Pro Cys Phe Ser His Leu Ser Cys Pro Ser Leu Val Pro Thr
 180 185 190
 Ala Val His His Glu
 195

<210> 4261

<211> 461

<212> PRT

<213> Homo sapiens

<400> 4261

Met Ser Arg Glu Gly Ala Gly Ala Ala Leu Val Ala Glu Val Ile Lys
 1 5 10 15
 Asp Arg Leu Cys Phe Ala Ile Leu Tyr Ser Arg Pro Lys Ser Ala Ser
 20 25 30
 Asn Val His Tyr Phe Ser Ile Asp Asn Glu Leu Glu Tyr Glu Asn Phe
 35 40 45
 Tyr Ala Asp Phe Gly Pro Leu Asn Leu Ala Met Val Tyr Arg Tyr Cys
 50 55 60
 Cys Lys Ile Asn Lys Lys Leu Lys Ser Ile Thr Met Leu Arg Lys Lys
 65 70 75 80

Ile Val His Phe Thr Gly Ser Asp Gln Arg Lys Gln Ala Asn Ala Ala			
85	90	95	
Phe Leu Val Gly Cys Tyr Met Val Ile Tyr Leu Gly Arg Thr Pro Glu			
100	105	110	
Glu Ala Tyr Arg Ile Leu Ile Phe Gly Glu Thr Ser Tyr Ile Pro Phe			
115	120	125	
Arg Asp Ala Ala Tyr Gly Ser Cys Asn Phe Tyr Ile Thr Leu Leu Asp			
130	135	140	
Cys Phe His Ala Val Lys Lys Ala Met Gln Tyr Gly Phe Leu Asn Phe			
145	150	155	160
Asn Ser Phe Asn Leu Asp Glu Tyr Glu His Tyr Glu Lys Ala Glu Asn			
165	170	175	
Gly Asp Leu Asn Trp Ile Ile Pro Asp Arg Phe Ile Ala Phe Cys Gly			
180	185	190	
Pro His Ser Arg Ala Arg Leu Glu Ser Gly Tyr His Gln His Ser Pro			
195	200	205	
Glu Thr Tyr Ile Gln Tyr Phe Lys Asn His Asn Val Thr Thr Ile Ile			
210	215	220	
Arg Leu Asn Lys Arg Met Tyr Asp Ala Lys Arg Phe Thr Asp Ala Gly			
225	230	235	240
Phe Asp His His Asp Leu Phe Phe Ala Asp Gly Ser Thr Pro Thr Asp			
245	250	255	
Ala Ile Val Lys Glu Phe Leu Asp Ile Cys Glu Asn Ala Glu Gly Ala			
260	265	270	
Ile Ala Val His Cys Lys Ala Gly Leu Gly Arg Thr Gly Thr Leu Ile			
275	280	285	
Ala Cys Tyr Ile Met Lys His Tyr Arg Met Thr Ala Ala Glu Thr Ile			
290	295	300	
Ala Trp Val Arg Ile Cys Arg Pro Gly Ser Val Ile Gly Pro Gln Gln			
305	310	315	320
Gln Phe Leu Val Met Lys Gln Thr Asn Leu Trp Leu Glu Gly Asp Tyr			
325	330	335	
Phe Arg Gln Lys Leu Lys Gly Gln Glu Asn Gly Gln His Arg Ala Ala			
340	345	350	
Phe Ser Lys Leu Leu Ser Gly Val Asp Asp Ile Ser Ile Asn Gly Val			
355	360	365	

Glu Asn Gln Asp Gln Gln Glu Pro Glu Pro Tyr Ser Asp Asp Asp Glu
 370 375 380
 Ile Asn Gly Val Thr Gln Gly Asp Arg Leu Arg Ala Leu Lys Ser Arg
 385 390 395 400
 Arg Gln Ser Lys Thr Asn Ala Ile Pro Leu Thr Val Ile Leu Gln Ser
 405 410 415
 Ser Val Gln Ser Cys Lys Thr Ser Glu Pro Asn Ile Ser Gly Ser Ala
 420 425 430
 Gly Ile Thr Lys Arg Thr Thr Arg Ser Ala Ser Arg Lys Ser Ser Val
 435 440 445
 Lys Ser Leu Ser Ile Ser Arg Thr Lys Thr Val Leu Arg
 450 455 460

<210> 4262

<211> 296

<212> PRT

<213> Homo sapiens

<400> 4262

Met Pro Ala Val Ser Lys Gly Asp Gly Met Arg Gly Leu Ala Val Phe
 1 5 10 15
 Ile Ser Asp Ile Arg Asn Cys Lys Ser Lys Glu Ala Glu Ile Lys Arg
 20 25 30
 Ile Asn Lys Glu Leu Ala Asn Ile Arg Ser Lys Phe Lys Gly Asp Lys
 35 40 45
 Ala Leu Asp Gly Tyr Ser Lys Lys Lys Tyr Val Cys Lys Leu Leu Phe
 50 55 60
 Ile Phe Leu Leu Gly His Asp Ile Asp Phe Gly His Met Glu Ala Val
 65 70 75 80
 Asn Leu Leu Ser Ser Asn Lys Tyr Thr Glu Lys Gln Ile Gly Tyr Leu
 85 90 95
 Phe Ile Ser Val Leu Val Asn Ser Asn Ser Glu Leu Ile Arg Leu Ile
 100 105 110
 Asn Asn Ala Ile Lys Asn Asp Leu Ala Ser Arg Asn Pro Thr Phe Met
 115 120 125

Cys Leu Ala Leu His Cys Ile Ala Asn Val Gly Ser Arg Glu Met Gly
 130 135 140
 Glu Ala Phe Ala Ala Asp Ile Pro Arg Ile Leu Val Ala Gly Asp Ser
 145 150 155 160
 Met Asp Ser Val Lys Gln Ser Ala Ala Leu Cys Leu Leu Arg Leu Tyr
 165 170 175
 Lys Ala Ser Pro Asp Leu Val Pro Met Gly Glu Trp Thr Ala Arg Val
 180 185 190
 Val His Leu Leu Asn Asp Gln His Met Gly Val Val Thr Ala Ala Val
 195 200 205
 Ser Leu Ile Thr Cys Leu Cys Lys Lys Asn Pro Asp Asp Phe Lys Thr
 210 215 220
 Cys Val Ser Leu Ala Val Ser Arg Leu Ser Arg Ile Val Ser Ser Ala
 225 230 235 240
 Ser Thr Asp Leu Gln Asp Tyr Thr Tyr Tyr Phe Val Pro Ala Pro Trp
 245 250 255
 Leu Ser Val Lys Leu Leu Arg Leu Leu Gln Cys Tyr Leu Asn Tyr His
 260 265 270
 Ser Pro Val Arg Gly Phe His Ile Trp Trp Glu Pro Ser Pro Thr Ala
 275 280 285
 His Ser His Asn Ser Gln Cys Val
 290 295

<210> 4263

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4263

Met Val Ser Lys Ser Ala Val Asp Phe Gly Leu Glu Glu His Lys His
 1 5 10 15
 Asn Leu Tyr Pro Lys Leu Phe Tyr Pro Phe Ala Asn Phe Leu Leu Leu
 20 25 30
 Asp Leu Ser Thr Lys Ser Val Val Leu Leu Leu Ser Leu Gln Leu Val
 35 40 45

Ser Val His Ala Val Gln Leu Leu Ile Thr Ser Gly Leu Trp Ala Gly
 50 55 60
 Ser Lys Asn Leu Lys Leu Ile Met Leu Asp Ser Gly Ala Ser Val Gly
 65 70 75 80
 Leu His Ile Val Tyr Phe Pro Pro Ser Pro Ser Ala Thr Ala Val Leu
 85 90 95
 Gly Arg Asp Ser Phe Phe Pro Leu Trp Leu Val Leu Glu Asn Cys Met
 100 105 110
 Gly Tyr Arg
 115

<210> 4264

<211> 307

<212> PRT

<213> Homo sapiens

<400> 4264

Met Pro Ser Leu Leu Gly Ala Pro Pro Tyr Ser Gly Leu Gly Gly Val
 1 5 10 15
 Gly Asp Pro Tyr Ala Pro Leu Met Val Leu Met Cys Arg Val Cys Leu
 20 25 30
 Glu Asp Lys Pro Ile Lys Pro Leu Pro Cys Cys Lys Lys Ala Val Cys
 35 40 45
 Glu Glu Cys Leu Lys Val Tyr Leu Ser Ala Gln Val Gln Leu Gly Gln
 50 55 60
 Val Glu Ile Lys Cys Pro Ile Thr Glu Cys Phe Glu Phe Leu Glu Glu
 65 70 75 80
 Thr Thr Val Val Tyr Asn Leu Thr His Glu Asp Ser Ile Lys Tyr Lys
 85 90 95
 Tyr Phe Leu Glu Leu Gly Arg Ile Asp Ser Ser Thr Lys Pro Cys Pro
 100 105 110
 Gln Cys Lys His Phe Thr Thr Phe Lys Lys Lys Gly His Ile Pro Thr
 115 120 125
 Pro Ser Arg Ser Glu Ser Lys Tyr Lys Ile Gln Cys Pro Thr Cys Gln
 130 135 140

Phe Val Trp Cys Phe Lys Cys His Ser Pro Trp His Glu Gly Val Asn
 145 150 155 160
 Cys Lys Glu Tyr Lys Lys Gly Asp Lys Leu Leu Arg His Trp Ala Ser
 165 170 175
 Glu Ile Glu His Gly Gln Arg Asn Ala Gln Lys Cys Pro Lys Cys Lys
 180 185 190
 Ile His Ile Gln Arg Thr Glu Gly Cys Asp His Met Thr Cys Ser Gln
 195 200 205
 Cys Asn Thr Asn Phe Cys Tyr Arg Cys Gly Glu Arg Tyr Arg Gln Leu
 210 215 220
 Arg Phe Phe Gly Asp His Thr Ser Asn Leu Ser Ile Phe Gly Cys Lys
 225 230 235 240
 Tyr Arg Tyr Leu Pro Glu Arg Pro His Leu Arg Arg Leu Val Arg Gly
 245 250 255
 Ser Val Cys Ala Gly Lys Leu Phe Ile Ala Pro Leu Ile Met Val Leu
 260 265 270
 Gly Leu Ala Leu Gly Ala Ile Ala Val Val Ile Gly Leu Phe Val Phe
 275 280 285
 Pro Ile Tyr Cys Leu Cys Lys Lys Gln Arg Lys Arg Ser Arg Thr Gly
 290 295 300
 Met His Trp
 305

<210> 4265

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4265

Met Ser Arg Arg Gly Thr Trp Gly Gly Thr Pro Arg Asp Ala Gly Leu
 1 5 10 15
 Cys Glu Pro Pro Ala Ser Ala Leu Thr Asn Gly Asp Leu Leu Pro His
 20 25 30
 Phe Ala Leu Ile Asn Phe Lys Gln Leu Lys Asp Cys Pro Ser Tyr Gly
 35 40 45

Phe Trp Phe Val Phe Leu Val Val Ser Val Val Val Glu Thr Ala Glu
 50 55 60
 Val Leu Gly Asp Ser Leu Gly Phe Gly Ala Gly His Gly Glu Gly Thr
 65 70 75 80
 Gly Lys Arg Trp Gly Leu Phe Leu Phe Val Thr Tyr Arg Thr Glu Thr
 85 90 95
 Ser Ser Val Asn Cys Tyr Pro Trp Gly Leu Leu His Pro Gly Val Arg
 100 105 110
 Pro Pro Ala Cys Leu Val Pro Cys Pro Ser Pro Arg Ser Arg Ala Gly
 115 120 125
 His Leu Arg Gly
 130

<210> 4266

<211> 160

<212> PRT

<213> Homo sapiens

<400> 4266

Met Val Ala Phe Val Gln Ala Arg Ala Gly Leu Met Asp Val Leu Val
 1 5 10 15
 Ser Pro Thr Val Gly Cys Gln Leu Ser Arg Pro Thr Gly Arg Asn Ile
 20 25 30
 Arg Leu Ser Ser Ser Leu Thr Pro Asp Thr Arg Pro Gln Trp Ala Cys
 35 40 45
 Thr Gly Pro Gln Lys Val Ser Leu Gly Phe Ala Phe Leu Val Ser Ile
 50 55 60
 Thr Val Lys Glu Ala Leu Ile Glu Gln Leu Gln Cys Thr Trp Ser Ser
 65 70 75 80
 Ala Ser Ala Gly His Leu Glu Ile Gly Thr Val Met Val Pro Ala Leu
 85 90 95
 Lys Glu Leu Met Thr Trp Trp Gly Pro Val Val Phe Lys Glu Pro Arg
 100 105 110
 Ser His Trp Ala Pro Lys Val Glu Leu Lys Asp Trp Gly Gln Leu Ala
 115 120 125

Leu Ser Leu Pro Pro Leu His Cys Leu Pro Leu Lys Asn Pro Thr Pro
 130 135 140
 Pro His Asp Gly Pro Leu Cys Ser Pro Cys Ile Ser Val Thr Val Asn
 145 150 155 160

<210> 4267

<211> 270

<212> PRT

<213> Homo sapiens

<400> 4267

Met Ser Ser Thr Gln Phe Asn Lys Gly Pro Ser Tyr Gly Leu Ser Ala
 1 5 10 15
 Glu Val Lys Asn Arg Leu Leu Ser Lys Tyr Asp Pro Gln Lys Glu Ala
 20 25 30
 Glu Leu Arg Thr Trp Ile Glu Gly Leu Thr Gly Leu Ser Ile Gly Pro
 35 40 45

Asp Phe Gln Lys Gly Leu Lys Asp Gly Thr Ile Leu Cys Thr Leu Met
 50 55 60
 Asn Lys Leu Gln Pro Gly Ser Val Pro Lys Ile Asn Arg Ser Met Gln
 65 70 75 80
 Asn Trp His Gln Leu Glu Asn Leu Ser Asn Phe Ile Lys Ala Met Val
 85 90 95
 Ser Tyr Gly Met Asn Pro Val Asp Leu Phe Glu Ala Asn Asp Leu Phe
 100 105 110
 Glu Ser Gly Asn Met Thr Gln Val Gln Val Ser Leu Leu Ala Leu Ala
 115 120 125
 Gly Lys Met Gly Thr Asn Lys Cys Ala Ser Gln Ser Gly Met Thr Ala
 130 135 140
 Tyr Gly Thr Arg Arg His Leu Tyr Asp Pro Lys Asn His Ile Leu Pro
 145 150 155 160
 Pro Met Asp His Ser Thr Ile Ser Leu Gln Met Gly Thr Asn Lys Cys
 165 170 175
 Ala Ser Gln Val Gly Met Thr Ala Pro Gly Thr Arg Arg His Ile Tyr

180	185	190
Asp Thr Lys Leu Gly Thr Asp Lys Cys Asp Asn Ser Ser Met Ser Leu		
195	200	205
Gln Met Gly Tyr Thr Gln Gly Ala Asn Gln Ser Gly Gln Val Phe Gly		
210	215	220
Leu Gly Arg Gln Ile Tyr Asp Pro Lys Tyr Cys Pro Gln Gly Thr Val		
225	230	235
Ala Asp Gly Ala Pro Ser Gly Thr Gly Asp Cys Pro Asp Pro Gly Glu		
245	250	255
Val Pro Glu Tyr Pro Pro Tyr Tyr Gln Glu Glu Ala Gly Tyr		
260	265	270

<210> 4268

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4268

Met Gly Asn Val Val Thr Cys Glu Leu Ser Val Glu Lys Val Cys Asp
1 5 10 15
Glu Asp Gly Glu Ala Lys Glu Leu Asp Tyr Gln Ala Thr Leu Leu Glu
20 25 30
Asp Gln Ala Pro Ala His Phe His Arg Asn Phe Pro Glu Gln Val Phe
35 40 45
Gln Asp Leu Gln Arg Lys Ser Pro Glu Ser Glu Ile Leu Ser Leu His
50 55 60
Leu Leu Val Glu Glu Leu Arg Leu Asn Pro Asp Gly Val Glu Thr Val
65 70 75 80
Asn Asp Thr Lys Pro Glu Leu Asn Val Ala Ser Ser Glu Gly Gly Glu
85 90 95
Met Glu Arg Arg Asp Ser Asp Ser Phe Leu Asn Ile Phe Pro Glu Lys
100 105 110
Gln Val Thr Lys Ala Gly Asn Thr Glu Pro Val Leu Glu Glu Trp Ile
115 120 125
Pro Val Leu Gln Arg Pro Ser Arg Thr Ala Ala Val Pro Thr Val Lys

130	135	140	
Asp Ala Leu Asp Ala Ala Leu Pro Ser Pro Glu Glu Gly Thr Ser Ile			
145	150	155	160
Ala Ala Val Pro Ala Pro Glu Gly Thr Ala Val Val Ala Ala Leu Val			
	165	170	175
Pro Phe Pro His Glu Asp Ile Leu Val Ala Ser Ile Val Ser Leu Glu			
	180	185	190
Glu Glu Asp Val Thr Ala Ala Ala Val Ser Ala Pro Glu Arg Ala Thr			
195	200	205	
Val Pro Ala Val Thr Val Ser Val Pro Glu Gly Thr Ala Ala Val Ala			
210	215	220	
Ala Val Ser Ser Pro Glu Glu Thr Ala Pro Ala Val Ala Ala Ala Ile			
225	230	235	240
Thr Gln Glu Gly Met Ser Ala Val Ala Gly Phe Ser Pro Glu Trp Ala			
	245	250	255
Ala Leu Ala Ile Thr Val Pro Ile Thr Glu Glu Asp Gly Thr Pro Glu			
260	265	270	
Gly Pro Val Thr Pro Ala Thr Thr Val His Ala Pro Glu Glu Pro Asp			
275	280	285	
Thr Ala Ala Val Arg Val Ser Thr Pro Glu Glu Pro Ala Ser Pro Ala			
290	295	300	
Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala Val			
305	310	315	320
Pro Thr Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala Val Pro Pro Pro			
	325	330	335
Glu Glu Pro Thr Ser Pro Ala Ala Ala Val Pro Thr Pro Glu Glu Pro			
340	345	350	
Thr Ser Pro Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro			
355	360	365	
Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala			
370	375	380	
Val Pro Thr Pro Glu Glu Pro Ala Ser Pro Ala Ala Ala Val Pro Thr			
385	390	395	400
Pro Glu Ile Gln Cys Gly Trp Trp Gly Trp			
	405	410	

<210> 4269

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4269

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Met Leu Val Leu Ala Trp Lys Leu Asp Ala Gln Asn Met Gly Tyr Phe
 1             5             10            15
Thr Leu Gln Glu Trp Leu Lys Gly Met Thr Ser Leu Gln Cys Asp Thr
      20             25             30
Thr Glu Lys Leu Arg Asn Thr Leu Asp Tyr Leu Arg Ser Phe Leu Asn
      35             40             45
Asp Ser Thr Asn Phe Lys Leu Ile Tyr Arg Tyr Ala Phe Asp Phe Ala
      50             55             60
Arg Gln Ser Lys Tyr Lys Val Ile Asn Lys Asp Gln Trp Cys Asn Val
      65             70             75            80
Leu Glu Phe Ser Arg Thr Ile Asn Leu Asp Leu Ser Asn Tyr Asp Glu
      85             90            95
Asp Gly Ala Trp Pro Val Leu Leu Asp Glu Phe Val Glu Trp Tyr Lys
      100            105            110
Asp Lys Gln Met Ser
      115

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<210> 4270

<211> 630

<212> PRT

<213> Homo sapiens

<400> 4270

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Met Val Val Val Ile Ala Val Ser Val Tyr Cys Tyr Trp Arg Lys Ser
 1             5             10            15
Gln Gln Ala Glu Arg Glu Tyr Glu Lys Ile Lys Ser Gln Leu Glu Gly
      20             25             30
Leu Glu Glu Ser Val Arg Asp Arg Cys Lys Lys Glu Phe Thr Asp Leu

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35	40	45
Met Ile Glu Met Glu Asp Gln Thr Asn Asp Val His Glu Ala Gly Ile		
50	55	60
Pro Val Leu Asp Tyr Lys Thr Tyr Thr Asp Arg Val Phe Phe Leu Pro		
65	70	75
Ser Lys Asp Gly Asp Lys Asp Val Met Ile Thr Gly Lys Leu Asp Ile		
85	90	95
Pro Glu Pro Arg Arg Pro Val Val Glu Gln Ala Leu Tyr Gln Phe Ser		
100	105	110
Asn Leu Leu Asn Ser Lys Ser Phe Leu Ile Asn Phe Ile His Thr Leu		
115	120	125
Glu Asn Gln Arg Glu Phe Ser Ala Arg Ala Lys Val Tyr Phe Ala Ser		
130	135	140
Leu Leu Thr Val Ala Leu His Gly Lys Leu Glu Tyr Tyr Thr Asp Ile		
145	150	155
Met His Thr Leu Phe Leu Glu Leu Leu Glu Gln Tyr Val Val Ala Lys		
165	170	175
Asn Pro Lys Leu Met Leu Arg Arg Ser Glu Thr Val Val Glu Arg Met		
180	185	190
Leu Ser Asn Trp Met Ser Ile Cys Leu Tyr Gln Tyr Leu Lys Asp Ser		
195	200	205
Ala Gly Glu Pro Leu Tyr Lys Leu Phe Lys Ala Ile Lys His Gln Val		
210	215	220
Glu Lys Gly Pro Val Asp Ala Val Gln Lys Lys Ala Lys Tyr Thr Leu		
225	230	235
Asn Asp Thr Gly Leu Leu Gly Asp Asp Val Glu Tyr Ala Pro Leu Thr		
245	250	255
Val Ser Val Ile Val Gln Asp Glu Gly Val Asp Ala Ile Pro Val Lys		
260	265	270
Val Leu Asn Cys Asp Thr Ile Ser Gln Val Lys Glu Lys Ile Ile Asp		
275	280	285
Gln Val Tyr Arg Gly Gln Pro Cys Ser Cys Trp Pro Arg Pro Asp Ser		
290	295	300
Val Val Leu Glu Trp Arg Pro Gly Ser Thr Ala Gln Ile Leu Ser Asp		
305	310	315
Leu Asp Leu Thr Ser Gln Arg Glu Gly Arg Trp Lys Arg Val Asn Thr		

	325		330		335										
Leu	Ile	His	Tyr	Asn	Val	Arg	Asp	Gly	Ala	Thr	Leu	Ile	Leu	Ser	Lys
	340					345								350	
Val	Gly	Val	Ser	Gln	Gln	Pro	Glu	Asp	Ser	Gln	Gln	Asp	Leu	Pro	Gly
	355					360								365	
Glu	Arg	His	Ala	Leu	Leu	Glu	Glu	Glu	Asn	Arg	Val	Trp	His	Leu	Val
	370					375								380	
Arg	Pro	Thr	Asp	Glu	Val	Asp	Glu	Gly	Lys	Ser	Lys	Arg	Gly	Ser	Val
385					390					395					400
Lys	Glu	Lys	Glu	Arg	Thr	Lys	Ala	Ile	Thr	Glu	Ile	Tyr	Leu	Thr	Arg
			405						410					415	
Leu	Leu	Ser	Val	Lys	Gly	Thr	Leu	Gln	Gln	Phe	Val	Asp	Asn	Phe	Phe
	420							425						430	
Gln	Ser	Val	Leu	Ala	Pro	Gly	His	Ala	Val	Pro	Pro	Ala	Val	Lys	Tyr
	435							440						445	
Phe	Phe	Asp	Phe	Leu	Asp	Glu	Gln	Ala	Glu	Lys	His	Asn	Ile	Gln	Asp
	450							455						460	
Glu	Asp	Thr	Ile	His	Ile	Trp	Lys	Thr	Asn	Ser	Leu	Pro	Leu	Arg	Phe
465					470					475					480
Trp	Val	Asn	Ile	Leu	Lys	Asn	Pro	His	Phe	Ile	Phe	Asp	Val	His	Val
			485						490					495	
His	Glu	Val	Val	Asp	Ala	Ser	Leu	Ser	Val	Ile	Ala	Gln	Thr	Phe	Met
	500								505					510	
Asp	Ala	Cys	Thr	Arg	Thr	Glu	His	Lys	Leu	Ser	Arg	Asp	Ser	Pro	Ser
	515							520						525	
Asn	Lys	Leu	Leu	Tyr	Ala	Lys	Glu	Ile	Ser	Thr	Tyr	Lys	Lys	Met	Val
	530							535						540	
Glu	Asp	Tyr	Tyr	Lys	Gly	Ile	Arg	Gln	Met	Val	Gln	Val	Ser	Asp	Gln
545					550					555					560
Asp	Met	Asn	Thr	His	Leu	Ala	Glu	Ile	Ser	Arg	Ala	His	Thr	Asp	Ser
			565						570					575	
Leu	Asn	Thr	Leu	Val	Ala	Leu	His	Gln	Leu	Tyr	Gln	Tyr	Thr	Gln	Lys
	580							585						590	
Tyr	Tyr	Asp	Glu	Ile	Ile	Asn	Ala	Leu	Glu	Glu	Asp	Pro	Ala	Ala	Gln
	595							600						605	
Lys	Met	Gln	Leu	Ala	Phe	Arg	Leu	Gln	Gln	Ile	Ala	Ala	Ala	Leu	Glu

610 615 620
 Asn Lys Val Thr Asp Leu
 625 630

<210> 4271

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4271

Met Gly His Gly Asp Gly Asp Met Gly Pro Cys Arg Leu His Lys Ala
 1 5 10 15
 Lys Trp Lys Ser Arg Phe Phe Thr Val Asn Val Gly Arg Pro Phe Phe
 20 25 30
 Phe Pro Gly Cys Leu Thr Tyr Tyr Cys Arg Ser Ala His Ile His Ser
 35 40 45
 Phe Pro Ser Val Leu Trp Gln Asp Asp Ile Ile Asp Asp Val Asp Ser
 50 55 60
 Phe Leu Ala Ala Ala Glu Thr Leu Lys Glu Arg Gly Ala Tyr Lys Ile
 65 70 75 80
 Phe Val Met Ala Thr His Gly Leu Leu Ser Ser Asp Ala Pro Arg Arg
 85 90 95
 Ile Glu Glu Ser Ala Ile Asp Glu Val Val Val Thr Asn Thr Ile Pro
 100 105 110
 His Glu Val Gln Lys Leu Gln Cys Pro Lys Ile Lys Thr Val Asp Ile
 115 120 125
 Ser Met Ile Leu Ser Glu Ala Ile Arg Arg Ile His Asn Gly Glu Ser
 130 135 140
 Met Ser Tyr Leu Phe Arg Asn Ile Gly Leu Asp Asp
 145 150 155

<210> 4272

<211> 138

<212> PRT

<213> Homo sapiens

<400> 4272

Met Arg Val Gly Trp Arg Gly Ala Val Cys Pro Ala Ser Arg Pro Arg
 1 5 10 15
 Gly Gly His Ser Pro Gln Ala Ile Leu Gly Ser Lys Asn Trp Pro Val
 20 25 30
 Arg Met Cys Leu Arg Leu Ser Pro Arg Gln Gln His His Gln Arg Gly
 35 40 45
 Thr Ser Leu Ser Trp Gly Ser His Val Glu Leu Tyr Leu Glu Gln Ile
 50 55 60
 Val Asn Arg Gly Ala Cys Gln Phe Thr Phe Ile Arg Thr Arg Phe Phe
 65 70 75 80
 Ser Leu Pro Asp Leu Pro Cys Lys Ser His Gly Gly Val Gly Ile Lys
 85 90 95
 Glu Lys Arg Ala Tyr Leu Asp Phe His Asp Leu Ser Val Asn Asp Ser
 100 105 110
 Tyr Pro Gly Trp Arg Phe Leu Ala Pro Phe Leu Ala Leu Asp Pro Met
 115 120 125
 Thr Pro Ser Met Ile Phe Phe Lys Val Gln
 130 135

<210> 4273

<211> 522

<212> PRT

<213> Homo sapiens

<400> 4273

Met Met Gly His Arg Pro Val Leu Val Leu Ser Gln Asn Thr Lys Arg
 1 5 10 15
 Glu Ser Gly Arg Lys Val Gln Ser Gly Asn Ile Asn Ala Ala Lys Thr
 20 25 30
 Ile Ala Asp Ile Ile Arg Thr Cys Leu Gly Pro Lys Ser Met Met Lys
 35 40 45
 Met Leu Leu Asp Pro Met Gly Gly Ile Val Met Thr Asn Asp Gly Asn

50	55	60
Ala Ile Leu Arg Glu Ile Gln Val Gln His Pro Ala Ala Lys Ser Met		
65	70	75
Ile Glu Ile Ser Arg Thr Gln Asp Glu Glu Val Gly Asp Gly Thr Thr		
85	90	95
Thr Val Val Ile Ser Ala Tyr Arg Lys Ala Leu Asp Asp Met Ile Ser		
100	105	110
Thr Leu Lys Lys Ile Ser Ile Pro Val Asp Ile Ser Asp Ser Asp Met		
115	120	125
Met Leu Asn Ile Ile Asn Ser Ser Ile Thr Thr Lys Ala Ile Ser Arg		
130	135	140
Trp Ser Ser Leu Ala Cys Asn Ile Ala Leu Asp Ala Val Lys Met Val		
145	150	155
Gln Phe Glu Glu Asn Gly Arg Lys Glu Ile Asp Ile Lys Lys Tyr Ala		
165	170	175
Arg Val Glu Lys Ile Pro Gly Gly Ile Ile Glu Asp Ser Cys Val Leu		
180	185	190
Arg Gly Val Met Ile Asn Lys Asp Val Thr His Pro Arg Met Arg Arg		
195	200	205
His Ile Lys Asn Pro Arg Ile Val Leu Leu Asp Ser Ser Leu Glu Tyr		
210	215	220
Lys Lys Gly Glu Ser Gln Thr Asp Ile Glu Ile Thr Arg Glu Glu Asp		
225	230	235
Phe Thr Arg Ile Leu Gln Met Glu Glu Glu Tyr Ile Gln Gln Leu Cys		
245	250	255
Glu Asp Ile Ile Gln Leu Lys Pro Asp Val Val Ile Thr Glu Lys Gly		
260	265	270
Ile Ser Asp Leu Ala Gln His Tyr Leu Met Arg Ala Asn Ile Thr Ala		
275	280	285
Ile Arg Arg Val Arg Lys Thr Asp Asn Asn Arg Ile Ala Arg Ala Cys		
290	295	300
Gly Ala Arg Ile Val Ser Arg Pro Glu Glu Leu Arg Glu Asp Asp Val		
305	310	315
Gly Thr Gly Ala Gly Leu Leu Glu Ile Lys Lys Ile Gly Asp Glu Tyr		
325	330	335
Phe Thr Phe Ile Thr Asp Cys Lys Asp Pro Lys Ala Cys Thr Ile Leu		

340 345 350
 Leu Arg Gly Ala Ser Lys Glu Ile Leu Ser Glu Val Glu Arg Asn Leu
 355 360 365
 Gln Asp Ala Met Gln Val Cys Arg Asn Val Leu Leu Asp Pro Gln Leu
 370 375 380
 Val Pro Gly Gly Gly Ala Ser Glu Met Ala Val Ala His Ala Leu Thr
 385 390 395 400
 Glu Lys Ser Lys Ala Met Thr Gly Val Glu Gln Trp Pro Tyr Arg Ala
 405 410 415
 Val Ala Gln Ala Leu Glu Val Ile Pro Arg Thr Leu Ile Gln Asn Cys
 420 425 430
 Gly Ala Ser Thr Ile Arg Leu Leu Thr Ser Leu Arg Ala Lys His Thr
 435 440 445
 Gln Glu Asn Cys Glu Thr Trp Gly Val Asn Gly Glu Thr Gly Thr Leu
 450 455 460
 Val Asp Met Lys Glu Leu Gly Ile Trp Glu Pro Leu Ala Val Lys Leu
 465 470 475 480
 Gln Thr Tyr Lys Thr Ala Val Glu Thr Ala Val Leu Leu Leu Arg Ile
 485 490 495
 Asp Asp Ile Val Ser Gly His Lys Lys Lys Gly Asp Asp Gln Ser Arg
 500 505 510
 Gln Gly Gly Ala Pro Asp Ala Gly Gln Glu
 515 520

<210> 4274

<211> 191

<212> PRT

<213> Homo sapiens

<400> 4274

Met Ser Ser Thr Leu Gly Lys Leu Ser Asn Gln Val Glu Glu Thr Leu
 1 5 10 15
 Pro Leu Leu Lys Lys Pro Leu Lys Arg Ala Ile Thr Thr Leu Met Ala
 20 25 30
 Gly Ile Leu Arg Leu Val Val Gln Trp Pro Pro Gly Arg Leu Gln Thr

35 40 45
 Val Thr Lys Gly Val Glu Ser Leu Ile Cys Thr Asp Trp Ile Arg His
 50 55 60
 Lys Phe Thr Arg Ser Arg Ile Pro Glu Lys Ala Phe Gln Ala Ser Pro
 65 70 75 80
 Glu Asp His Glu Lys Tyr Gly Gly Asp Pro Gln Asn Pro His Lys Leu
 85 90 95
 His Ile Val Thr Arg Ile Lys Ser Thr Arg Arg Arg Pro Tyr Trp Glu
 100 105 110
 Lys Asp Ile Ile Lys Met Leu Gly Leu Glu Lys Ala His Thr Pro Gln
 115 120 125
 Val His Lys Asn Ile Pro Ser Val Asn Ala Lys Leu Lys Val Val Lys
 130 135 140
 His Leu Ile Arg Ile Lys Pro Leu Lys Leu Pro Gln Gly Leu Pro Thr
 145 150 155 160
 Glu Glu Asn Met Ser Asn Thr Cys Leu Lys Ser Thr Gly Glu Leu Val
 165 170 175
 Val Gln Trp His Leu Lys Pro Val Glu Gln Lys Ala His Glu Ser
 180 185 190

<210> 4275

<211> 131

<212> PRT

<213> Homo sapiens

<400> 4275

Met Leu Asp Ile Leu Val Tyr Glu Glu Gln Gln Gln Ala Ala Ala Gly
 1 5 10 15
 Glu Ala Gly Pro Cys Leu Glu Tyr Leu Leu Gln His Lys Ile Leu Glu
 20 25 30
 Thr Leu Cys Thr Leu Gly Lys Ala Glu Val Gly Gly Pro Leu Arg Ala
 35 40 45
 Gly Pro Gly Arg Gly Gly Arg Pro Leu Arg Ala Trp Pro Gly Arg Gly
 50 55 60

Gly Arg Pro Leu Cys Ala Gly Pro Gly Arg Gly Gly Arg Pro Ser Glu
 65 70 75 80
 Cys Trp Ala Arg Leu Arg Trp Ala Val Gly Ser Gly Gln Pro Gly Ala
 85 90 95
 Pro Trp Ile Pro Gly Leu Ser Ala Tyr Ala Leu Pro Ser Pro Asp Thr
 100 105 110
 Glu Ser Gly Ser Ser Gly Glu Arg Ser Lys Gln Asp Gly His Cys Gly
 115 120 125
 Cys Leu Thr
 130

<210> 4276

<211> 357

<212> PRT

<213> Homo sapiens

<400> 4276

Met Phe Cys Tyr Lys Trp Arg Arg Arg Arg Thr Thr Thr Met Gly Ile
 1 5 10 15
 Ser Glu Glu Phe Asn Gly Lys Pro Asp Ser Leu Phe Phe Asn Asp Gly
 20 25 30
 Gln Arg Arg Ile Asp Phe Val Leu Val Tyr Glu Asp Glu Ser Arg Lys
 35 40 45
 Glu Thr Asn Lys Lys Gly Thr Asn Glu Lys Gln Arg Arg Lys Arg Gln
 50 55 60
 Ala Tyr Glu Ser Asn Leu Ile Cys His Gly Leu Gln Leu Glu Ala Thr
 65 70 75 80
 Arg Ser Val Leu Asp Asp Lys Leu Val Phe Val Lys Val His Ala Pro
 85 90 95
 Trp Glu Val Leu Cys Thr Tyr Ala Glu Ile Met His Ile Lys Leu Pro
 100 105 110

 Leu Lys Pro Asn Asp Leu Lys Asn Arg Ser Ser Ala Phe Gly Thr Leu
 115 120 125
 Asn Trp Phe Thr Lys Val Leu Ser Val Asp Glu Ser Ile Ile Lys Pro

130	135	140	
Glu Gln Glu Phe Phe Thr Ala Pro Phe Glu Lys Asn Arg Met Asn Asp			
145	150	155	160
Phe Tyr Ile Val Asp Arg Asp Ala Phe Phe Asn Pro Ala Thr Arg Ser			
	165	170	175
Arg Ile Val Tyr Phe Ile Leu Ser Arg Val Lys Tyr Gln Val Ile Asn			
	180	185	190
Asn Val Ser Lys Phe Gly Ile Asn Arg Leu Val Asn Ser Gly Ile Tyr			
	195	200	205
Lys Ala Ala Phe Pro Leu His Asp Cys Lys Phe Arg Arg Gln Ser Glu			
210	215	220	
Asp Pro Ser Cys Pro Asn Glu Arg Cys Leu Leu Tyr Arg Glu Trp Ala			
225	230	235	240
His Pro Arg Ser Ile Tyr Lys Lys Gln Pro Leu Asp Leu Ile Arg Lys			
	245	250	255
Tyr Tyr Gly Glu Lys Ile Gly Ile Tyr Phe Ala Trp Leu Gly Tyr Tyr			
	260	265	270
Thr Gln Met Leu Leu Leu Ala Ala Val Val Gly Val Ala Cys Phe Leu			
	275	280	285
Tyr Gly Tyr Leu Asn Gln Asp Asn Cys Thr Trp Ser Lys Glu Val Cys			
290	295	300	
His Pro Asp Ile Gly Gly Lys Ile Ile Met Cys Pro Gln Cys Asp Arg			
305	310	315	320
Leu Cys Pro Phe Trp Lys Leu Asn Ile Thr Cys Glu Ser Ser Lys Lys			
	325	330	335
Leu Cys Ile Phe Asp Ser Phe Gly Thr Leu Val Phe Ala Val Phe Met			
	340	345	350
Gly Val Trp Asp Pro			
355			

<210> 4277

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4277

Met Pro Gln Leu Gly Phe Val Pro Ile Leu Phe Cys Leu Cys Arg Lys
 1 5 10 15
 Ser Val Ser Asn His Ser Gly Pro Val Gln Cys Phe Trp Met Lys Gln
 20 25 30
 Asn Cys Glu Thr His Thr Ala Leu Ser Thr Cys Leu Pro Trp Gly Glu
 35 40 45
 Ser His Ile Asn Ile Ile Val Ser Tyr Leu His Ile Tyr Pro Cys Ser
 50 55 60
 Cys Gly Trp Gln Gln Pro Arg Asp Lys Arg Gln Ile Lys Ser Ala Arg
 65 70 75 80
 Val Ser Leu Ala Arg Lys Gly Arg Val Gln Val Thr Leu Lys Gly Gln
 85 90 95
 Glu Thr His Ser Arg Trp Gly Ile Pro Gly Val Pro Gly Ile Gly Pro
 100 105 110
 Glu

<210> 4278

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4278

Met Pro Ala Phe Ser Val Pro Cys Ser Arg Thr Val Asn Ser Phe Leu
 1 5 10 15
 Ser Leu Phe Ser Tyr Ser Cys Leu Ile Asn Asp Ser Ala Ile Asn Cys
 20 25 30
 Asp Glu Cys Phe Arg Phe Met Trp Ser Ile Lys Arg Asp Tyr Thr Ser
 35 40 45
 Trp Asn Phe Val Ala Ile Ser Gln Ala Ser Glu Ile Val Tyr Leu Ser
 50 55 60
 Ile Ser Pro Glu Glu Ser Lys Ile Ile Asp Gly Val Trp Ile Gln Lys
 65 70 75 80
 Arg Asp Tyr Phe Ser Leu Ser Leu Arg Leu Leu Asp Ser Ile Leu Gln

10402

85 90 95
Ser Val Met Asp His Ile
100

<210> 4279

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4279

Met Val Ser Asn Thr Cys Cys Arg Leu His Val Glu Leu Ser Leu Ile
1 5 10 15
Ser Pro Arg Val Gly Met Ser Arg Gly Gly Leu Met Phe Leu Pro Leu
20 25 30
Thr Leu Leu Ser Ser Pro Gly Gln Asp Phe Glu Trp Arg Val Trp Gly
35 40 45
Ile Leu Leu Ala Val Ala Leu Gly Thr Leu Ala Thr Pro Phe Ala Leu
50 55 60
Pro Cys Val Val Gly Gln Tyr Leu Glu Trp Ser Gly Gln Thr Arg Glu
65 70 75 80
Thr Tyr Arg Arg Ser Arg Gly His Ser Asp Ala His Arg Pro Leu Ser
85 90 95
Val Gly Arg Leu Gly Cys Asp Leu Phe Arg Arg Ser Gly Val His Thr
100 105 110
Val

<210> 4280

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4280

Met Lys Thr Gly Arg Ser His Thr Leu Arg Ser Glu Ala Gln Gly His
 1 5 10 15
 His Lys Pro Gly Arg His Glu Ala Arg Pro Glu Arg His Arg Gln Ala
 20 25 30
 Glu Glu Trp Thr Glu Glu Gln Gln Arg Ser Leu Glu Asp Glu Ser Gln
 35 40 45
 Leu Cys Lys Glu Leu Pro Arg Val Phe Leu Pro Gln Lys Phe His Leu
 50 55 60
 Ala Thr Glu Met Ala Leu Ala Leu Gly Gln Glu Arg Gly Gly Asp Glu
 65 70 75 80
 Leu Leu Met Ala Met Thr Phe Ser Gln His Val Leu Pro Val Leu Pro
 85 90 95
 Arg Val Glu Met Pro Leu
 100

<210> 4281

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4281

Met His Ala Asp Pro Ala Ala Pro Arg Gly Cys His Arg Phe Pro Pro
 1 5 10 15
 Ser Gln Thr Gln His Thr Leu Pro Ala Trp Arg Cys Ala Ala Pro Ser
 20 25 30
 Leu Trp Ser Arg Val Trp Gln Ser Ala His Gln Phe Leu Leu Leu Pro
 35 40 45
 Trp Asp Leu Pro Ala Phe Ser Thr Ala Ile His Ser Ala Asn Trp Asp
 50 55 60
 Cys Trp Ser Pro Tyr Leu Ala Ala Ser Asp Lys Val Arg Ala Thr Pro
 65 70 75 80
 Gly Arg Glu Asp Thr Cys Gly Glu Asn Ser Cys Val Ile Tyr Phe Ser
 85 90 95
 Phe Gly Ile Gly Cys Leu Gln Arg Phe Met Gly Gly Gly Gly Leu Met
 100 105 110

Leu Arg Ala Gln Lys Phe Gln Gly His Leu Gly Arg Pro Asp Ile Gln
 115 120 125
 Arg Pro Ser Arg Cys Ala Cys Ser Met Tyr Gln Gly Arg Arg Phe Ser
 130 135 140
 Gln Gln Gly Trp Cys His Trp His Asp Arg Pro Ala Leu Ala Glu Arg
 145 150 155 160
 Ser Pro Val Phe Gly Val Gln Pro Pro
 165

<210> 4282

<211> 285

<212> PRT

<213> Homo sapiens

<400> 4282

Met Phe Thr Ser Gln Gln Trp Lys His Leu Ser Asn Asp Phe Leu Lys
 1 5 10 15
 Thr Gln Gln Glu Lys Arg His Ser Trp Phe Lys Ala Ser Gly Thr Ile
 20 25 30
 Lys Lys Phe Arg Ala Gly Leu Ser Ile Phe Ser Pro Ile Pro Lys Ser
 35 40 45
 Pro Ser Phe Pro Ile Ile Gln Asp Ser Met Leu Lys Gly Lys Leu Gly
 50 55 60
 Val Pro Glu Leu Arg Val Gly Arg Leu Met Asn Arg Ser Ile Ser Cys
 65 70 75 80
 Thr Met Lys Asn Pro Lys Val Glu Val Phe Gly Tyr Pro Pro Ser Pro
 85 90 95
 Gln Val Ser Gly His Cys Lys Asn Ile Pro Thr Leu Glu Tyr Gly Phe
 100 105 110
 Leu Val Gln Ile Met Lys Tyr Ala Glu Gln Arg Ile Pro Thr Leu Asn
 115 120 125
 Glu Tyr Cys Val Val Cys Asp Glu Gln His Val Phe Gln Asn Gly Ser
 130 135 140
 Met Leu Lys Pro Ala Val Cys Thr Arg Glu Leu Cys Val Phe Ser Phe
 145 150 155 160

Tyr Thr Leu Gly Val Met Ser Gly Ala Ala Glu Glu Val Ala Thr Gly
 165 170 175
 Ala Glu Val Val Asp Leu Leu Val Ala Met Cys Arg Ala Ala Leu Glu
 180 185 190
 Ser Pro Arg Arg Ser Ile Ile Phe Glu Pro Tyr Pro Ser Val Val Asp
 195 200 205
 Pro Thr Asp Pro Lys Thr Leu Ala Phe Asn Pro Lys Lys Lys Asn Tyr
 210 215 220
 Glu Arg Leu Gln Lys Ala Leu Asp Ser Val Met Ser Ile Arg Glu Met
 225 230 235 240
 Thr Gln Gly Ser Tyr Leu Glu Ile Lys Lys Gln Met Asp Lys Leu Asp
 245 250 255
 Pro Leu Ala His Pro Leu Leu Gln Trp Ile Ile Ser Ser Asn Arg Ser
 260 265 270
 His Ile Val Lys Leu Pro Leu Ser Arg Trp Val Pro His
 275 280 285

<210> 4283

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4283

Met Pro Arg Gly Val Gln Ile Lys Lys Arg Ala Cys Ala Gln Met Trp
 1 5 10 15
 Ala Gln Val Ser Gln Arg Gly Lys Ser Ser Phe Trp Pro Ser Leu Gln
 20 25 30
 His Ala Leu Gly Pro Ser Asn Ile Ser Lys Ile Arg Lys Glu Leu Phe
 35 40 45
 Ser Ser His Gln Tyr Leu Leu Cys Phe Gln Thr Ile Phe Phe Ala Asn
 50 55 60
 Leu Pro Cys Gln Cys Ser Val Pro Pro Cys Pro His Thr Ser Ser Ala
 65 70 75 80
 Gly Arg Ala Ala Leu Glu Thr Val Leu Ser Ile Pro Cys Gly Glu Arg
 85 90 95

Gly Thr Ala Ala Pro Leu Val Ser Ala Glu Ile Gln Ser Ser Ile Ser
 100 105 110
 Ser Leu Lys Gly Asp Phe Leu His Thr
 115 120

<210> 4284

<211> 119

<212> PRT

<213> Homo sapiens

<400> 4284

Met Ile Asn Glu Ser Gly Thr Glu Leu Gln Asp Lys Tyr Cys Tyr Arg
 1 5 10 15
 Ala Ser Pro Ala Ala Gln Ile Thr Gly Lys Ile Ser Pro Arg Leu Phe
 20 25 30
 Ile Ser Pro Leu Pro Pro Trp Pro Ser Gly Ser Ser Gln Gln Ser Arg
 35 40 45
 Ile His Pro Ser Pro Phe Pro Arg Pro His Pro Ser Leu Ser Ser Gln
 50 55 60
 Arg Thr Ala Gly Glu Arg Gly Met Gln Ile Gly Pro Gly Ala Gly Gly
 65 70 75 80
 Pro Leu Cys Leu Ala Ala Leu Cys Leu Pro Ala Gln Leu Trp Arg Gln
 85 90 95
 Pro Arg Gly Ala Gly Met Val Arg Val Met Leu Phe Ser Val Val Asp
 100 105 110
 Glu Cys Leu Ala Leu Gln Thr
 115

<210> 4285

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4285

Met Asn Ser Cys Arg Glu Gln Cys Pro Phe His Gly Trp Ala His Ser
 1 5 10 15
 Trp His Gln Leu Ser Trp Ser Asn Gly Asn Pro Ile Tyr Cys Thr Arg
 20 25 30
 Asp Thr Phe Cys Gly Asp Ser Glu Met Gln Arg Asp Gln Ile Thr Ser
 35 40 45
 Arg Lys Gly Arg Ala Trp Cys Glu Gly Thr Arg Leu Thr Asp Ile Pro
 50 55 60
 Asp Asp Lys Pro Val Gly Pro Ser Gly Ser Leu Pro Pro Ala Ser His
 65 70 75 80
 Ser Gly Glu Gly Pro Val Ile Glu Ala Val Gly Ile Pro Glu Glu Arg
 85 90 95
 Thr Gln Gln Lys Gln Val Glu Gly Val Gly Gln Arg Ala Asp Leu Pro
 100 105 110
 Pro Ala Thr Leu Ser Tyr Cys Ser Ser Arg Gly Asn Asn Leu Gly Gly
 115 120 125
 Cys His Glu Gly Phe Ser Gly Ala Pro Phe Pro Trp Gly Leu Met Glu
 130 135 140
 Gly Gly Asn Cys Val Asn Val Val Trp Trp Lys Lys Gln Ala Trp Ser
 145 150 155 160
 Ala His Arg Leu Gly Val Pro Arg Ile
 165

<210> 4286

<211> 168

<212> PRT

<213> Homo sapiens

<400> 4286

Met Cys Ala Ser Thr Ser Arg Arg Ser Ser Thr Trp Pro Gln Pro Ala
 1 5 10 15
 Trp Arg Gln Arg Ala Gly Ala Lys Ser Gln Arg Ser Arg Cys Ser Gly
 20 25 30
 Ser Cys Cys Ser Leu Thr Ala Arg Pro Gln Pro Arg Val Ala Tyr Ala
 35 40 45

His Leu Met Ser Ser Leu Arg Ile Arg Arg Leu Ser Gly Arg Thr Trp
 50 55 60
 Leu Ser Ser Leu Ala Asp Arg Arg Pro Arg Gln Arg Ala Gly Gln Leu
 65 70 75 80
 Pro Ser Cys Thr Thr Gln Gly Ser Thr Gln Pro Ala Gln Lys Thr Trp
 85 90 95
 Pro His Gly Val Val Ser Gly Ser Ser Arg Thr Leu Trp His Ser Ala
 100 105 110
 His Phe Arg Ser Gly Ser Thr Ser Pro Ser Lys Arg Ser Ser Ser Lys
 115 120 125
 Pro Met Val Ala Ala Arg Pro Arg Gly Arg Arg Arg Ala Ala Gly Arg
 130 135 140
 Pro Leu Pro Pro His Glu Ala Ala Gln Thr Gly Arg Leu Arg Arg Pro
 145 150 155 160
 Arg Ala Arg Trp Leu Ser Pro Asp
 165

<210> 4287

<211> 495

<212> PRT

<213> Homo sapiens

<400> 4287

Met His His Trp Cys Ile Pro Phe Ser Val Asp Gly Gln Pro Ala Pro
 1 5 10 15
 Ser Leu Arg Trp Leu Phe Asn Gly Ser Val Leu Asn Glu Thr Ser Phe
 20 25 30
 Ile Phe Thr Glu Phe Leu Glu Pro Ala Ala Asn Glu Thr Val Arg His
 35 40 45
 Gly Cys Leu Arg Leu Asn Gln Pro Thr His Val Asn Asn Gly Asn Tyr
 50 55 60
 Thr Leu Leu Ala Ala Asn Pro Phe Gly Gln Ala Ser Ala Ser Ile Met
 65 70 75 80
 Ala Ala Phe Met Asp Asn Pro Phe Glu Phe Asn Pro Glu Asp Pro Ile
 85 90 95

Pro Asp Thr Asn Ser Thr Ser Gly Asp Pro Val Glu Lys Lys Asp Glu
 100 105 110
 Thr Pro Phe Gly Val Ser Val Ala Val Gly Leu Ala Val Phe Ala Cys
 115 120 125
 Leu Phe Leu Ser Thr Leu Leu Leu Val Leu Asn Lys Cys Gly Arg Arg
 130 135 140
 Asn Lys Phe Gly Ile Asn Arg Pro Ala Val Leu Ala Pro Glu Asp Gly
 145 150 155 160
 Leu Ala Met Ser Leu His Phe Met Thr Leu Gly Gly Ser Ser Leu Ser
 165 170 175
 Pro Thr Glu Gly Lys Gly Ser Gly Leu Gln Gly His Ile Ile Glu Asn
 180 185 190
 Pro Gln Tyr Phe Ser Asp Ala Cys Val His His Ile Lys Arg Arg Asp
 195 200 205
 Ile Val Leu Lys Trp Gly Leu Gly Glu Gly Ala Phe Gly Lys Val Phe
 210 215 220
 Leu Ala Glu Cys His Asn Leu Leu Pro Glu Gln Asp Lys Met Leu Val
 225 230 235 240
 Ala Val Lys Ala Leu Lys Glu Ala Ser Glu Ser Ala Arg Gln Asp Phe
 245 250 255
 Gln Arg Glu Ala Glu Leu Leu Thr Met Leu Gln His Gln His Ile Val
 260 265 270
 Arg Phe Phe Gly Val Cys Thr Glu Gly Arg Pro Leu Leu Met Val Phe
 275 280 285
 Glu Tyr Met Arg His Gly Asp Leu Asn Arg Phe Leu Arg Ser His Gly
 290 295 300
 Pro Asp Ala Lys Leu Leu Ala Gly Gly Glu Asp Val Ala Pro Gly Pro
 305 310 315 320
 Leu Gly Leu Gly Gln Leu Leu Ala Val Ala Ser Gln Val Ala Ala Gly
 325 330 335
 Met Val Tyr Leu Ala Gly Leu His Phe Val His Arg Asp Leu Ala Thr
 340 345 350
 Arg Asn Cys Leu Val Gly Gln Gly Leu Val Val Lys Ile Gly Asp Phe
 355 360 365
 Gly Met Ser Arg Asp Ile Tyr Ser Thr Asp Tyr Tyr Arg Val Gly Gly
 370 375 380

Arg Thr Met Leu Pro Ile Arg Trp Met Pro Pro Glu Ser Ile Leu Tyr
 385 390 395 400
 Arg Lys Phe Thr Thr Glu Ser Asp Val Trp Ser Phe Gly Val Val Leu
 405 410 415
 Trp Glu Ile Phe Thr Tyr Gly Lys Gln Pro Trp Tyr Gln Leu Ser Asn
 420 425 430

Thr Glu Ala Ile Asp Cys Ile Thr Gln Gly Arg Glu Leu Glu Arg Pro
 435 440 445
 Arg Ala Cys Pro Pro Glu Val Tyr Ala Ile Met Arg Gly Cys Trp Gln
 450 455 460
 Arg Glu Pro Gln Gln Arg His Ser Ile Lys Asp Val His Ala Arg Leu
 465 470 475 480
 Gln Ala Leu Ala Gln Ala Pro Pro Val Tyr Leu Asp Val Leu Gly
 485 490 495

<210> 4288

<211> 252

<212> PRT

<213> Homo sapiens

<400> 4288

Met Pro Ile Leu Gln Ala Leu Cys Leu Leu Pro Lys Val Ser Thr Pro
 1 5 10 15
 Ser Ile Thr Val Pro Ser Pro Gln Arg Ser Ala Ala Leu Ser Ile Thr
 20 25 30
 Val Pro Ser Pro Gln Arg Ser Ala Ala Pro Ser Ile Thr Val Pro Ser
 35 40 45
 Pro Gln Arg Ser Ala Pro Arg Ala Ser Leu Cys Pro Pro His Lys Gly
 50 55 60
 Gln His Pro Glu His His Cys Ala Leu Pro Pro Lys Gly Gln His Pro
 65 70 75 80
 Glu His His Cys Ala Leu Pro Thr Lys Val Ser Thr Pro Ser Ile Thr
 85 90 95

Val Pro Ser Pro Gln Arg Ser Pro Gln Met Ser Leu Ser Ser Ala Ala
 100 105 110
 Arg Gly Ser Asn Thr Asp Val Ala Gly Leu Ser Val Gly Glu Trp Pro
 115 120 125
 Gly Trp Gln Leu Trp Gly Glu Gly Gln Asp Gly Ala Gln Gln Arg Pro
 130 135 140
 His Leu Pro Ser Gly Gly Ser Gly Ala Gly Val Ala Pro Gln Arg Leu
 145 150 155 160
 Pro Lys Ser Arg Ala Cys Ile Leu Cys Ser Arg His Gly Ala Gln Gly
 165 170 175
 Pro Trp Val Thr Gly Arg Ser Val Ser His Ser His Cys Pro Ile Gln
 180 185 190
 Gly Leu Leu Asp Leu Gln Arg Pro Asp Leu Gly Thr Asp Trp Gly Arg
 195 200 205
 Thr Arg Pro Leu Cys Thr Pro Gln Asp Leu Cys Gly Gly Arg Pro Leu
 210 215 220
 Pro Ser Thr Trp Gly Val Thr Met His Leu Ile His Cys Leu Ser Val
 225 230 235 240
 Ser Leu Ser Leu Cys Leu Ser Leu Ser His Cys Val
 245 250

<210> 4289

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4289

Met Met Phe Leu Met Asn Thr Ser Pro Cys Pro Phe Phe Phe Phe Phe
 1 5 10 15
 Arg Trp Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile
 20 25 30
 Ser Gly His Cys Asn Leu Arg Pro Pro Ala Ser Ser Asp Ser Pro Val
 35 40 45
 Ser Ala Ser Arg Val Ala Arg Ile Thr Gly Ala Arg His Gln Ala Trp
 50 55 60

Leu Ile Phe Ile Phe Leu Val Glu Met Gly Phe Cys Leu Val Gly Gln
 65 70 75 80
 Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Pro Ser Thr Leu Ala Ser
 85 90 95
 Gln Ser Ala Gly Thr Thr Gly Val Ser His His Ala Trp Ser Pro Thr
 100 105 110
 Cys

<210> 4290

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4290

Met Ser Tyr Gly Arg Pro Pro Pro Asp Val Glu Gly Met Thr Ser Leu
 1 5 10 15
 Lys Val Asp Asn Leu Thr Tyr Arg Thr Ser Pro Asp Thr Leu Arg Arg
 20 25 30
 Val Phe Glu Lys Tyr Gly Arg Val Gly Asp Val Tyr Ile Pro Arg Asp
 35 40 45
 Arg Tyr Thr Lys Glu Ser Arg Gly Phe Ala Phe Val Arg Gly Pro Gly
 50 55 60
 Pro Gly Leu Gly Pro Gly Val Leu Pro Gln Cys Pro Arg Gly Asn Pro
 65 70 75 80
 Asn Pro Gly Arg Asp Arg Arg Val Pro Pro Ser Leu Leu Lys Arg Lys
 85 90 95
 Glu Arg Cys Pro Leu Lys Lys Met Val Met Ser Gly Asn Pro Arg His
 100 105 110
 Ile Thr Leu Ile His Lys Trp Asp Leu Gly
 115 120

<210> 4291

<211> 372

<212> PRT

<213> Homo sapiens

<400> 4291

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Met Glu Pro Gly Arg Arg Gly Ala Ala Ala Leu Leu Ala Leu Leu Cys
  1             5             10             15
Val Ala Cys Ala Leu Arg Ala Gly Arg Ala Gln Tyr Glu Arg Tyr Ser
      20             25             30
Phe Arg Ser Phe Pro Arg Asp Glu Leu Met Pro Leu Glu Ser Ala Tyr
      35             40             45
Arg His Ala Leu Asp Lys Tyr Ser Gly Glu His Trp Ala Glu Ser Val
      50             55             60
Gly Tyr Leu Glu Ile Ser Leu Arg Leu His Arg Leu Leu Arg Leu Phe
      65             70             75             80
Gly Gly Leu Leu Arg Arg Ala His Cys Leu Lys Arg Cys Lys Gln Gly
      85             90             95
Leu Pro Ala Phe Arg Gln Ser Gln Pro Ser Arg Glu Val Leu Ala Asp
      100            105            110
Phe Gln Arg Arg Glu Pro Tyr Lys Phe Leu Gln Phe Ala Tyr Phe Lys
      115            120            125
Ala Asn Asn Leu Pro Lys Ala Ile Ala Ala Ala His Thr Phe Leu Leu
      130            135            140
Lys His Pro Asp Asp Glu Met Met Lys Arg Asn Met Ala Tyr Tyr Lys
      145            150            155            160
Ser Leu Pro Gly Ala Glu Asp Tyr Ile Lys Asp Leu Glu Thr Lys Ser
      165            170            175
Tyr Glu Ser Leu Phe Ile Arg Ala Val Arg Ala Tyr Asn Gly Glu Asn
      180            185            190
Trp Arg Thr Ser Ile Thr Asp Met Glu Leu Ala Leu Pro Asp Phe Phe
      195            200            205
Lys Ala Phe Tyr Glu Cys Leu Ala Ala Cys Glu Gly Ser Arg Glu Ile
      210            215            220
Lys Asp Phe Lys Asp Phe Tyr Leu Ser Ile Ala Asp His Tyr Val Glu
      225            230            235            240
Val Leu Glu Cys Lys Ile Gln Cys Glu Glu Asn Leu Thr Pro Val Ile
      245            250            255

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Gly Gly Tyr Pro Val Glu Lys Phe Val Ala Thr Met Tyr His Tyr Leu
 260 265 270
 Gln Phe Ala Tyr Tyr Lys Leu Asn Asp Leu Lys Asn Ala Ala Pro Cys
 275 280 285
 Ala Val Ser Tyr Leu Leu Phe Asp Gln Asn Asp Lys Val Met Gln Gln
 290 295 300
 Asn Leu Val Tyr Tyr Gln Tyr His Arg Asp Thr Trp Gly Leu Ser Asp
 305 310 315 320
 Glu His Phe Gln Pro Arg Pro Glu Ala Val Gln Phe Phe Asn Val Thr
 325 330 335
 Thr Leu Gln Lys Glu Leu Tyr Asp Phe Ala Lys Glu Asn Ile Met Asp
 340 345 350
 Asp Asp Glu Gly Glu Val Val Glu Tyr Val Asp Asp Leu Leu Glu Leu
 355 360 365
 Glu Glu Thr Ser
 370

<210> 4292

<211> 230

<212> PRT

<213> Homo sapiens

<400> 4292

Met Arg Val Phe Ile Gln Ile Cys Phe Ser Tyr Phe Leu Val Asp Ser
 1 5 10 15
 Ala Gly Gln Val Val Ala Asn Gln Glu Gly Val Phe Arg Ser Asn Cys
 20 25 30
 Met Asp Cys Leu Asp Arg Thr Asn Val Ile Gln Ser Leu Leu Ala Arg
 35 40 45
 Arg Ser Leu Gln Ala Gln Leu Gln Arg Leu Gly Val Leu His Val Gly
 50 55 60
 Gln Lys Leu Glu Glu Gln Asp Glu Phe Glu Lys Ile Phe Lys Asn Ala
 65 70 75 80
 Trp Ala Asp Asn Ala Asn Ala Cys Ala Lys Gln Tyr Ala Gly Thr Gly
 85 90 95

Ala Leu Lys Thr Asp Phe Thr Arg Thr Gly Lys Arg Thr His Leu Gly
 100 105 110
 Leu Ile Met Asp Gly Trp Asn Ser Met Ile Arg Tyr Tyr Lys Asn Asn
 115 120 125
 Phe Ser Asp Gly Phe Arg Gln Asp Ser Ile Asp Leu Phe Leu Gly Asn
 130 135 140
 Tyr Ser Val Asp Glu Leu Glu Ser His Ser Pro Leu Ser Val Pro Arg
 145 150 155 160
 Asp Trp Lys Phe Leu Ala Leu Pro Ile Ile Met Val Val Ala Phe Ser
 165 170 175
 Met Cys Ile Ile Cys Leu Leu Met Ala Gly Asp Thr Trp Thr Glu Thr
 180 185 190
 Leu Ala Tyr Val Leu Phe Trp Gly Val Ala Ser Ile Gly Thr Phe Phe
 195 200 205
 Ile Ile Leu Tyr Asn Gly Lys Asp Phe Val Asp Ala Pro Arg Leu Val
 210 215 220
 Gln Lys Glu Lys Ile Asp
 225 230

<210> 4293

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4293

Met Phe His Leu Gln Pro Arg Glu Ala Gln Lys Ser Ser Ser Ala Leu
 1 5 10 15
 Glu Val His Lys Lys Tyr Gly Asp Ser Thr Gly Thr Thr Leu Glu Glu
 20 25 30
 Ala Gln Lys Ile Asn Asn Gly Ser Ser Gln Ala Asp Gly Thr Leu Lys
 35 40 45
 Pro Val Asp Glu Lys Glu Glu Ala Val Ala Ala Glu Val Gly Trp Met
 50 55 60
 Thr Ser Val Lys Asp Trp Ala Gly Val Met Ile Ser Ala Gln Thr Leu

65 70 75 80
 Thr Gly Arg Val Leu Val Val Leu Val Phe Ala Leu Ser Ile Gly Ala
 85 90 95
 Leu Val Ile Tyr Phe Ile Asp Ser Ser Lys
 100 105

<210> 4294

<211> 151

<212> PRT

<213> Homo sapiens

<400> 4294

Met Leu Arg Thr Leu Val Leu Lys Gln Thr Leu Asp Leu Leu Leu Pro
 1 5 10 15
 Leu Leu Glu Ala Leu Leu Val Leu Gly Val Pro Gln His Leu Glu Leu
 20 25 30
 Gln Pro Leu Pro Val Gln Val Ser Leu Leu Leu Leu Gln Leu Leu Asp
 35 40 45
 Leu Gly Ser Leu Lys Ser His Arg Leu His His Phe His Ser Lys Ala
 50 55 60
 Leu Gln Leu Pro Val Leu Asp His Leu Asp Phe Gln Asp Phe Gln Leu
 65 70 75 80
 Pro Trp Gln Gln Val Leu Ser Glu Leu Gln Trp Pro Gln Pro Leu Glu
 85 90 95
 Val Ala Val Leu Trp Leu Val Leu Val Val Arg Ala His Ile Leu Thr
 100 105 110
 Leu Leu Phe Leu Ser His Pro Val Thr Leu Leu Glu Ile Ala Ala Tyr
 115 120 125
 Pro Leu Leu Cys Gln Pro Gln Ala Ala Ser Leu Gln Gln Ile Met Cys
 130 135 140
 Tyr Ser His Pro Glu Ile Asp
 145 150

<210> 4295

<211> 229

<212> PRT

<213> Homo sapiens

<400> 4295

```

Met Ala Gln Gly Asp Ala Ala Ala Thr Ala Gly His Ala Gln Leu His
  1             5             10             15
Cys Gly His Glu Thr Ser Glu Gly Cys Val Ser Pro Pro Gly Val Thr
          20             25             30
Val Pro Trp Pro Thr Gln Gly Glu Arg Pro Val Gly Pro Asn Ala Glu
      35             40             45
Glu Arg Lys Arg Arg Ala Thr Leu Gln Trp Gly Arg Gly Ala Lys Lys
      50             55             60
Gly Pro Arg Asn Pro Thr Pro Glu Asn Ser Arg Arg Leu Gly Arg Gln
      65             70             75             80
Gly Ala Leu Val Gln Glu Arg Ser Phe Lys Lys Phe Gly Ala Arg Arg
          85             90             95
Ala Leu Asn Ser Pro Val Lys Lys Thr Glu Gln Gln Phe Gly Gly Thr
      100             105             110
Arg Leu Pro Gly His Asn Gly Arg Thr Glu Ala Arg Asp Arg Glu Pro
      115             120             125
Leu Arg Arg Arg Pro Thr Pro Leu Thr Ile His Arg Phe Pro Gly Gly
      130             135             140
Glu Ala Pro Lys His Ile Gly Ser Trp Leu Tyr Ser Ala Ala Val Pro
      145             150             155             160
Arg Pro Lys Ser Arg Pro Ala Ser Cys Cys Pro His Ser Leu Arg His
          165             170             175
Arg Pro Leu Thr Ser Ser Pro Arg Ser Ser Gln Ser Cys Cys Gln Leu
          180             185             190
Phe Gly Val His Arg Gln Arg Pro Ile Arg Ala Gly Leu Arg Gly Arg
          195             200             205
His Ala Ser Glu Gly Arg Lys Arg Arg Gly Gly Gly Arg Val Arg Glu
          210             215             220
Pro Arg Arg Leu Gln
225

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<210> 4296

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4296

```

Met Cys Pro Arg Leu Ala Glu Val Leu Pro Leu Asn Ala Ala Gly Gln
 1             5             10             15
Asp Ala Thr Leu Ser Thr Ile Ser Ser Val Pro Gly Ile Pro Pro Thr
      20             25             30
His Thr His Ile His Ser Leu Leu Leu Thr Ser Ser His Thr Leu Thr
      35             40             45
His Pro Thr Thr Leu Thr His Phe Gln Asn Pro Pro Thr Leu Thr Leu
      50             55             60
Thr Leu Ala Ser Pro Phe Pro Cys Ser Val Thr Ser Leu Gln Val Pro
      65             70             75             80
Ala Pro His Ser Leu Leu Gln Ser Gln Pro Pro Trp Cys Gln Pro Ser
              85             90             95
Leu Val Pro Ala Ile Ser Pro Lys Tyr Pro Pro Phe Trp Ala Pro Phe
              100            105            110
Cys Pro Glu Gly Pro Glu Val Ser Leu Gly Ser Thr Cys
      115             120             125

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<210> 4297

<211> 188

<212> PRT

<213> Homo sapiens

<400> 4297

```

Met Ile Ala Cys Arg Ala Leu Thr Val Leu Thr Trp Thr His Val Arg
 1             5             10             15
Ile Asp Glu Gly His Val Pro Ala Met Phe Ala Gln Ser Ser Val Phe
      20             25             30

```

Arg Glu Leu Ile Thr Gly Val Ala Lys Ala Thr Gly Ala Thr His Leu
 35 40 45
 Leu Ser Cys Phe Gln Val Arg Thr Ala Leu Val Trp Ala Ser Glu Thr
 50 55 60
 Ala Arg Trp Ile Leu Gly Val Leu Ser Phe Glu Arg Ser Leu Ile Tyr
 65 70 75 80
 His Gln Glu Lys Phe Val Ala Phe Ala Ser Ser Ile Gln Pro Arg Ile
 85 90 95
 His Ser Ser Val Leu Trp Gly Asn Gln Gly Cys Gly Ser Thr Gln Glu
 100 105 110
 Ser Cys Arg Pro Arg His Phe Leu Gly Asn Ala Leu Leu Arg Trp Arg
 115 120 125
 Pro Ala Ala Cys Pro Gly Pro Glu Gly Ser Gly Ser Val Glu Gln Ser
 130 135 140
 Trp Gly Leu Gly Ala Gly Arg Tyr Gly Thr Ser Cys Phe Leu Arg Gly
 145 150 155 160
 Leu Arg Gly Arg Ala Gly Gly Leu Gly Arg Gly Arg Val Gly Ala Ile
 165 170 175
 Asp Met Arg Thr Ser Ser Ser Ser Ser Ala Glu Leu
 180 185

<210> 4298

<211> 518

<212> PRT

<213> Homo sapiens

<400> 4298

Met Val Gln Leu Val Leu Gln Tyr Arg Asp Tyr Gln Arg Ala Thr Gln
 1 5 10 15
 Arg Leu Ala Gly Ile Pro Glu Leu Leu Asn Lys Leu Arg Gln Ala Pro
 20 25 30
 Asp Phe Tyr Val Glu Met Lys Trp Glu Phe Thr Ser Trp Val Pro Leu
 35 40 45
 Val Ser Lys Met Cys Pro Ser Asp Val Tyr Arg Val Trp Lys Arg Gly

50	55	60			
Glu Ser Leu Arg Val Asp Thr Ser Leu Leu Gly Phe Glu His Met Thr					
65	70	75	80		
Trp Gln Arg Gly Arg Arg Ser Phe Ile Phe Lys Gly Gln Glu Ala Arg					
	85	90	95		
Ala Leu Val Met Glu Val Asp His Asp Arg Gln Val Val His Val Glu					
100	105	110			
Thr Leu Gly Leu Thr Leu Gln Glu Pro Glu Thr Leu Leu Ala Ala Met					
115	120	125			
Arg Pro Ser Glu Glu His Val Ala Ser Arg Leu Thr Ser Pro Ile Val					
130	135	140			
Ser Thr His Leu Asp Thr Arg Asn Val Ala Phe Glu Arg Asn Lys Cys					
145	150	155	160		
Gly Ile Trp Gly Trp Arg Ser Glu Lys Met Glu Thr Val Ser Gly Tyr					
	165	170	175		
Glu Ala Lys Val Tyr Ser Ala Thr Asn Val Glu Leu Val Thr Arg Thr					
180	185	190			
Arg Thr Glu His Leu Ser Asp Gln Asp Lys Ser Arg Ser Lys Ala Gly					
195	200	205			
Lys Thr Pro Phe Gln Ser Phe Leu Gly Met Ala Gln Gln His Ser Ser					
210	215	220			
His Thr Gly Ala Pro Val Gln Gln Ala Ala Ser Pro Thr Asn Pro Thr					
225	230	235	240		
Ala Ile Ser Pro Glu Glu Tyr Phe Asp Pro Asn Phe Ser Leu Glu Ser					
	245	250	255		
Arg Asn Ile Gly Arg Pro Ile Glu Met Ser Ser Lys Val Gln Arg Phe					
260	265	270			
Lys Ala Thr Leu Trp Leu Ser Glu Glu His Pro Leu Ser Leu Gly Asp					
275	280	285			
Gln Val Thr Pro Ile Ile Asp Leu Met Ala Ile Ser Asn Ala His Phe					
290	295	300			
Ala Lys Leu Arg Asp Phe Ile Thr Leu Arg Leu Pro Pro Gly Phe Pro					
305	310	315	320		
Val Lys Ile Glu Ile Pro Leu Phe His Val Leu Asn Ala Arg Ile Thr					
	325	330	335		
Phe Ser Asn Leu Cys Gly Cys Asp Glu Pro Leu Ser Ser Val Trp Val					

340 345 350
 Pro Ala Pro Ser Ser Ala Val Ala Ala Ser Gly Asn Ser Phe Pro Cys
 355 360 365
 Glu Val Asp Pro Thr Val Phe Glu Val Pro Asn Gly Tyr Ser Val Leu
 370 375 380
 Gly Met Glu Arg Asn Glu Pro Leu Arg Asp Glu Asp Asp Asp Leu Leu
 385 390 395 400
 Gln Phe Ala Ile Gln Gln Ser Leu Leu Glu Ala Gly Thr Glu Ala Glu
 405 410 415
 Gln Val Thr Val Trp Glu Ala Leu Thr Asn Thr Arg Pro Gly Ala Arg
 420 425 430
 Pro Pro Pro Gln Ala Thr Val Tyr Glu Glu Gln Leu Gln Leu Glu Arg
 435 440 445
 Ala Leu Gln Glu Ser Leu Gln Leu Ser Thr Glu Pro Arg Gly Pro Gly
 450 455 460
 Ser Pro Pro Arg Thr Pro Pro Ala Pro Gly Pro Pro Ser Phe Glu Glu
 465 470 475 480
 Gln Leu Arg Leu Ala Leu Glu Leu Ser Ser Arg Glu Gln Glu Glu Arg
 485 490 495
 Glu Arg Arg Gly Gln Gln Glu Glu Glu Tyr Leu Gln Arg Ile Leu Gln
 500 505 510
 Leu Ser Leu Thr Glu His
 515

<210> 4299

<211> 163

<212> PRT

<213> Homo sapiens

<400> 4299

Met Pro Gly Val Ser Val Ala Ile Arg Leu Ser Tyr Phe Leu Pro Leu
 1 5 10 15
 Lys Leu Pro Pro Asn Thr Pro Gly Gly Leu Leu Pro Trp Ser Thr Leu
 20 25 30
 Ala His Pro Leu Arg Asp Pro Arg Ala Ser Gly Gly Tyr Leu Val Glu

35 40 45
 Lys Arg Pro Ser Pro Ser Asp Ala Phe Pro Ser Trp Arg Cys Ser Gly
 50 55 60
 Ala Trp Cys His Ala Gly Gly Gly Arg Gly Cys Arg Gly Ala His Ala
 65 70 75 80
 Trp Cys Pro Thr Ser Leu Val Leu Val Ser Ser Pro Asn Pro Thr Arg
 85 90 95
 Gly Leu Ser Leu Val Trp Asp Arg Leu Gly Lys Cys Gly Ala Ser Met
 100 105 110
 Ala Glu Ala Trp Leu Phe Glu Gly Val Thr Leu Gln Ser Leu Ser Gln
 115 120 125
 Gly Trp Gly Trp Pro Cys Gly Pro Gly Val Ala Glu Ser Gly Thr Gly
 130 135 140
 Val Gln Pro Ser Pro Thr Leu Trp Trp Ser Gly Ala Val Thr Ala Leu
 145 150 155 160
 Glu Pro Phe

<210> 4300

<211> 154

<212> PRT

<213> Homo sapiens

<400> 4300

Met Val Ala Arg Leu Pro Thr Pro Lys Leu Pro Arg Trp Leu Arg Val
 1 5 10 15
 Leu Thr Pro Arg Thr Pro Thr Pro Phe Cys Gly Pro Ser Ala Arg Trp
 20 25 30
 Val Ala His Pro Asp Trp Ala Val Gly Ser Pro Leu Pro Arg Arg Gly
 35 40 45
 Gly Thr Arg Gly Arg His Ala Ala Ala Gly Ala Gly Glu Thr Thr Glu
 50 55 60
 Lys Glu Pro Ala Gly Gly Arg Lys Arg Pro Arg Pro Arg Pro Met Ala
 65 70 75 80
 Ala Gln Ser Leu Asp Arg Gly Phe Leu Glu Gly Ala Trp Asp Pro Cys

85 90 95
 Cys His Cys Leu Arg Leu Gly Ile His Ser Arg Leu Leu Asp Pro Ser
 100 105 110
 Leu Gln Pro Arg Trp Asp Pro Cys Leu Leu Pro Leu Leu Pro Leu Ala
 115 120 125
 Pro Gly Arg Gly Arg Ala Glu Glu Thr Ser Leu Glu Gln Pro Ser Ala
 130 135 140
 Thr His Arg Gln Phe Pro Arg Arg Gly Gly
 145 150

<210> 4301

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4301

Met Leu Gly Cys Phe Met Asp Leu Leu Ser Ile Leu Met Ile Gln Asp
 1 5 10 15
 Ile Leu Ser Met Pro Val Leu Phe Ser Leu Gly Leu Cys Phe His Ser
 20 25 30
 Lys Leu Leu Arg Cys Ser Pro Asn Pro Gly Glu Asn Lys Ile His Tyr
 35 40 45
 Gln Ile Gln Gln Val Gln Pro Ser Trp Ser Ser Leu Arg Ser His Arg
 50 55 60
 Val Ala Pro Trp Asn Asp Ala Ser Leu Cys Gln Gly Pro Pro Phe Gly
 65 70 75 80
 Ile Gly Arg Val Leu Gly Arg Ile Leu His Leu Gln Arg Pro Leu Gly
 85 90 95
 Ser Leu Arg Ser Gly Gly Gly Trp Thr Gln Lys Gly Arg Leu Asn Thr
 100 105 110
 Arg Trp Gly Arg Lys Asn Val Thr Ile Gly Ser Gln Thr Glu Ala Ser
 115 120 125
 Pro Leu Lys Tyr Gly Val Gly Gly Leu Thr Ser Ala Leu Trp Asn Val
 130 135 140
 Leu Ser Asp Cys Cys Arg Val Pro Gly Pro Pro

145

150

155

<210> 4302

<211> 443

<212> PRT

<213> Homo sapiens

<400> 4302

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Met Ser Gln Arg Asp Gly Val Cys Gly Ser His Glu Val Ala Gly Ala
 1             5             10            15
Ala Ser Pro Gly Ala Asp Gly Gly Leu Ser Leu Ala Ala Tyr Cys Lys
      20             25            30
Asn Ser Val Asp Gly Leu Trp Tyr Cys Phe Asp Asp Ser Asp Val Gln
      35             40            45
Gln Leu Ser Glu Asp Glu Val Cys Thr Gln Thr Ala Tyr Ile Leu Phe
      50             55            60
Tyr Gln Arg Arg Thr Ala Ile Pro Ser Trp Ser Ala Asn Ser Ser Val
      65             70            75            80
Ala Gly Ser Thr Ser Ser Ser Leu Cys Glu His Trp Val Ser Arg Leu
      85             90            95
Pro Gly Ser Lys Pro Ala Ser Val Thr Ser Ala Ala Ser Ser Arg Arg
      100            105            110
Thr Ser Leu Ala Ser Leu Ser Glu Ser Val Glu Met Thr Gly Glu Arg
      115            120            125
Ser Glu Asp Asp Gly Gly Phe Ser Thr Arg Pro Phe Val Arg Ser Val
      130            135            140
Gln Arg Gln Ser Leu Ser Ser Arg Ser Ser Val Thr Ser Pro Leu Ala
      145            150            155            160
Val Asn Glu Asn Cys Met Arg Pro Ser Trp Ser Leu Ser Ala Lys Leu
      165            170            175
Gln Met Arg Ser Asn Ser Pro Ser Arg Phe Ser Gly Asp Ser Pro Ile
      180            185            190
His Ser Ser Ala Ser Thr Leu Glu Lys Ile Gly Glu Ala Ala Asp Asp
      195            200            205
Lys Val Ser Ile Ser Cys Phe Gly Ser Leu Arg Asn Leu Ser Ser Ser

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210	215	220	
Tyr Gln Glu Pro Ser Asp Ser His Ser Arg Arg Glu His Lys Ala Val			
225	230	235	240
Gly Arg Ala Pro Leu Ala Val Met Glu Gly Val Phe Lys Asp Glu Ser			
245	250	255	
Asp Thr Arg Arg Leu Asn Ser Ser Val Val Asp Thr Gln Ser Lys His			
260	265	270	
Ser Ala Gln Gly Asp Arg Leu Pro Pro Leu Ser Gly Pro Phe Asp Asn			
275	280	285	
Asn Asn Gln Ile Ala Tyr Val Asp Gln Ser Asp Ser Val Asp Ser Ser			
290	295	300	
Pro Val Lys Glu Val Lys Ala Pro Ser His Pro Gly Ser Leu Ala Lys			
305	310	315	320
Lys Pro Glu Ser Thr Thr Lys Arg Ser Pro Ser Ser Lys Gly Thr Ser			
325	330	335	
Glu Pro Glu Lys Ser Leu Arg Lys Gly Arg Pro Ala Leu Ala Ser Gln			
340	345	350	
Glu Ser Ser Leu Ser Ser Thr Ser Pro Ser Ser Pro Leu Pro Val Lys			
355	360	365	
Val Ser Leu Lys Pro Ser Arg Ser Arg Ser Lys Ala Asp Ser Ser Ser			
370	375	380	
Arg Gly Ser Gly Arg His Ser Ser Pro Ala Pro Ala Gln Thr Gln Phe			
385	390	395	400
Pro Ser Gly Glu Pro Gly Pro Ser Arg Gly Gly Gln Gly Gly Arg Glu			
405	410	415	
Ala Arg Ala Glu Leu Leu His Gly Gln Pro Ala Leu Pro Gln His Lys			
420	425	430	
His Gln Val Trp Phe Glu Glu Gly Gln Gln Val			
435	440		

<210> 4303

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4303

Met Tyr Thr Ser Leu His Thr Gln Ile Pro Glu Asn Gly Ile Ala Gly
 1 5 10 15
 Leu Tyr Asp Asn Phe Ile Phe Leu Phe Phe Leu Arg Gln Asp Leu Phe
 20 25 30
 Leu Ser Pro Arg Leu Gly Cys Gly Gly Ala Ile Met Ala His Cys Ser
 35 40 45
 Leu Asp Ile Leu Gly Ser Ser Asn Pro Pro Ile Ser Ala Ser Gln Val
 50 55 60
 Ala Gly Thr Thr Gly Thr Cys His Tyr Thr Trp Leu Ile Phe Val Phe
 65 70 75 80
 Phe Val Glu Val Gly Ser Pro Tyr Phe Ser Gln Ala Gly Leu Lys Leu
 85 90 95
 Leu Ser Ser Asp Asn Ser Leu Thr Ser Ala Ser Gln Ser Val Gly Ile
 100 105 110
 Ile Gly Met Ile His His Thr Gln Pro Tyr Leu Ile Phe Asn Ile Leu
 115 120 125
 Gly Asn Leu Tyr Pro Asn Phe Leu Gly Gly Cys Ile Ile Leu Phe Tyr
 130 135 140
 Gln Gln Cys Met Gly Val Pro Asn Ala Leu His Pro
 145 150 155

<210> 4304

<211> 172

<212> PRT

<213> Homo sapiens

<400> 4304

Met Ser Ser Gly Asn Tyr Gln Gln Ser Glu Ala Leu Ser Lys Pro Thr
 1 5 10 15
 Phe Ser Glu Glu Gln Ala Ser Ala Leu Val Glu Ser Val Phe Gly Leu
 20 25 30
 Lys Val Ser Lys Val Arg Pro Leu Pro Ser Tyr Asp Asp Gln Asn Phe
 35 40 45
 His Val Tyr Val Ser Lys Thr Lys Asp Gly Pro Thr Glu Tyr Val Leu

50 55 60
 Lys Ile Ser Asn Thr Lys Ala Ser Lys Asn Pro Asp Leu Ile Glu Val
 65 70 75 80
 Gln Asn His Ile Ile Met Phe Leu Lys Ala Ala Gly Phe Pro Thr Ala
 85 90 95
 Ser Val Cys His Thr Lys Gly Asp Asn Thr Ala Ser Leu Val Ser Val
 100 105 110
 Asp Ser Gly Ser Glu Ile Lys Ser Tyr Leu Val Arg Leu Leu Thr Tyr
 115 120 125
 Leu Pro Gly Arg Pro Ile Ala Glu Leu Pro Val Ser Pro Gln Leu Leu
 130 135 140
 Tyr Glu Ile Gly Lys Leu Ala Ala Lys Leu Asp Lys Thr Leu Gln Glu
 145 150 155 160
 Gly Lys Pro Arg Val Thr Pro Leu Leu Ala Lys Asn
 165 170

<210> 4305

<211> 150

<212> PRT

<213> Homo sapiens

<400> 4305

Met Leu Gln Phe Pro Leu Asp Leu Ala Val Gln Asn Val Val Cys Pro
 1 5 10 15
 Val Ser Val Thr Glu Arg Gly Phe Pro Ser Leu Phe Phe Cys Gln Tyr
 20 25 30
 Ser Ala Asp Leu Trp Asn Ile Gly Ile Ser Val Phe Ile Gln Asp Gly
 35 40 45
 Pro Phe Leu Val Val Arg Leu Ile Leu Met Thr Tyr Phe Lys Val Ile
 50 55 60
 Asn Gln Met Leu Val Phe Phe Ala Ala Lys Asn Phe Leu Val Val Val
 65 70 75 80
 Leu Gln Leu Tyr Arg Leu Val Val Leu Ala Leu Ala Val Arg Ala Ser
 85 90 95
 Leu Arg Ser Gln Ser Glu Gly Leu Lys Gly Glu His Gly Cys Arg Ala

100 105 110
 Gln Thr Ser Glu Ser Gly Pro Ser Gln Arg Asp Trp Gln Asn Glu Ser
 115 120 125

Lys Glu Gly Leu Ala Ile Pro Leu Arg Gly Ser Pro Val Thr Ser Asp
 130 135 140

Asp Ser His His Thr Pro
 145 150

<210> 4306

<211> 803

<212> PRT

<213> Homo sapiens

<400> 4306

Met Ala Glu Arg Gly Gly Asp Gly Gly Glu Ser Glu Arg Phe Asn Pro
 1 5 10 15
 Gly Glu Leu Arg Met Ala Gln Gln Gln Ala Leu Arg Phe Arg Gly Pro
 20 25 30

Ala Pro Pro Pro Asn Ala Val Met Arg Gly Pro Pro Pro Leu Met Arg
 35 40 45

Pro Pro Pro Pro Phe Gly Met Met Arg Gly Pro Pro Pro Pro Pro Arg
 50 55 60

Pro Pro Phe Gly Arg Pro Pro Phe Ile Leu Ile Cys Arg Gln Tyr Leu
 65 70 75 80

Gln Arg Pro Pro Phe Met Pro Pro Pro Met Ser Ser Met Pro Pro Pro
 85 90 95

Pro Gly Met Met Phe Pro Pro Gly Met Pro Pro Val Thr Ala Pro Gly
 100 105 110

Thr Pro Ala Leu Pro Pro Thr Glu Glu Ile Trp Val Glu Asn Lys Thr
 115 120 125

Pro Asp Gly Lys Val Tyr Tyr Tyr Asn Ala Arg Thr Arg Glu Ser Ala
 130 135 140

Trp Thr Lys Pro Asp Gly Val Lys Val Ile Gln Gln Ser Glu Leu Thr

145 150 155 160
 Pro Met Leu Ala Ala Gln Ala Gln Val Gln Ala Gln Ala Gln Ala Gln
 165 170 175
 Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln
 180 185 190
 Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln
 195 200 205
 Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln Ala Gln
 210 215 220
 Ala Gln Ala Gln Val Gln Ala Gln Val Gln Ala Gln Val Gln Ala Gln
 225 230 235 240
 Ala Val Gly Ala Ser Thr Pro Thr Thr Ser Ser Pro Ala Pro Ala Val
 245 250 255
 Ser Thr Ser Thr Ser Ser Ser Thr Pro Ser Ser Thr Thr Ser Thr Thr
 260 265 270
 Thr Thr Ala Thr Ser Val Ala Gln Thr Val Ser Thr Pro Thr Thr Gln
 275 280 285
 Asp Gln Thr Pro Ser Ser Ala Val Ser Val Ala Thr Pro Thr Val Ser
 290 295 300
 Val Ser Thr Pro Ala Pro Thr Ala Thr Pro Val Gln Thr Val Pro Gln
 305 310 315 320
 Pro His Pro Gln Thr Leu Pro Pro Ala Val Pro His Ser Val Pro Gln
 325 330 335
 Pro Thr Thr Ala Ile Pro Ala Phe Pro Pro Val Met Val Pro Pro Phe
 340 345 350
 Arg Val Pro Leu Pro Gly Met Pro Ile Pro Leu Pro Gly Val Leu Pro
 355 360 365
 Gly Met Ala Pro Pro Ile Val Pro Met Ile His Pro Gln Val Ala Ile
 370 375 380
 Ala Ala Ser Pro Ala Thr Leu Ala Gly Ala Thr Ala Val Ser Glu Trp
 385 390 395 400
 Thr Glu Tyr Lys Thr Ala Asp Gly Lys Thr Tyr Tyr Tyr Asn Asn Arg
 405 410 415
 Thr Leu Glu Ser Thr Trp Lys Lys Pro Gln Glu Leu Lys Glu Lys Glu
 420 425 430
 Lys Leu Glu Glu Lys Ile Lys Glu Pro Ile Lys Glu Pro Ser Glu Glu

435	440	445
Pro Ile Lys Glu Ile Lys Glu Glu Pro Lys Glu Glu Glu Met Thr Glu		
450	455	460
Glu Glu Lys Ala Ala Gln Lys Ala Lys Pro Val Ala Thr Ala Pro Ile		
465	470	475
Pro Gly Thr Pro Trp Cys Val Val Trp Thr Gly Asp Glu Arg Val Phe		
	485	490
		495
Phe Tyr Asn Pro Thr Thr Arg Leu Ser Met Trp Asp Arg Pro Asp Asp		
	500	505
		510
Leu Ile Gly Arg Ala Asp Val Asp Lys Ile Ile Gln Glu Pro Pro His		
	515	520
		525
Lys Lys Gly Met Glu Glu Leu Lys Lys Leu Arg His Pro Thr Pro Thr		
	530	535
		540
Met Leu Ser Ile Gln Lys Trp Gln Phe Ser Met Ser Ala Ile Lys Glu		
545	550	555
		560
Glu Gln Glu Leu Met Glu Glu Ile Asn Glu Asp Glu Pro Val Lys Ala		
	565	570
		575
Lys Lys Arg Lys Arg Asp Asp Asn Lys Asp Ile Asp Ser Glu Lys Glu		
	580	585
		590
Ala Ala Met Glu Ala Glu Ile Lys Ala Ala Arg Glu Arg Ala Ile Val		
	595	600
		605
Pro Leu Glu Ala Arg Met Lys Gln Phe Lys Asp Met Leu Leu Glu Arg		
	610	615
		620
Gly Val Ser Ala Phe Ser Thr Trp Glu Lys Glu Leu His Lys Ile Val		
625	630	635
		640
Phe Asp Pro Arg Tyr Leu Leu Leu Asn Pro Lys Glu Arg Lys Gln Val		
	645	650
		655
Phe Asp Gln Tyr Val Lys Thr Arg Ala Glu Glu Glu Arg Arg Glu Lys		
	660	665
		670
Lys Asn Lys Ile Met Gln Ala Lys Glu Asp Phe Lys Lys Met Met Glu		
	675	680
		685
Glu Ala Lys Phe Asn Pro Arg Ala Thr Phe Ser Glu Phe Ala Ala Lys		
	690	695
		700
His Ala Lys Asp Ser Arg Phe Lys Ala Ile Glu Lys Met Lys Asp Arg		
705	710	715
		720
Glu Ala Leu Phe Asn Glu Phe Val Ala Ala Ala Arg Lys Lys Glu Lys		

725 730 735
 Glu Asp Ser Lys Thr Arg Gly Glu Lys Ile Lys Ser Asp Phe Phe Glu
 740 745 750
 Leu Leu Ser Asn His His Leu Asp Ser Gln Ser Arg Trp Ser Lys Val
 755 760 765
 Lys Asp Lys Val Glu Ser Asp Pro Arg Tyr Lys Thr Val Asp Ser Ser
 770 775 780
 Ser Met Arg Glu Asp Leu Phe Lys Gln Tyr Ile Glu Lys Ile Ala Lys
 785 790 795 800
 Asn Leu Asp

<210> 4307

<211> 199

<212> PRT

<213> Homo sapiens

<400> 4307

Met Lys Ser Trp Leu Leu Arg Leu His Ser Glu Leu Glu His Asn Thr
 1 5 10 15
 Thr Leu Phe Cys Glu Ser His Cys Pro Ser Leu Ala Leu Gly Ser Phe
 20 25 30
 Cys Arg Leu Leu Leu Gly Pro Leu Thr Cys Pro His Gln Gln Thr Phe
 35 40 45
 His Phe Gly Ala Arg Pro Asp Phe Leu Ala Leu Gln Gly Ala Pro Gly
 50 55 60
 Ser Phe Ile Pro Cys Pro Gly Pro Gly Ile Ser Pro Phe Ser Arg Val
 65 70 75 80
 Leu Trp Val Leu Thr Glu Tyr Trp Gly Pro Arg Pro Gly Cys Trp Val
 85 90 95
 Gly Ser Ala Leu Ile Ala Pro Gly Phe Gln Leu Thr Glu His Gly Cys
 100 105 110
 Thr Cys Pro Asp Thr Trp Arg His Leu Cys Pro Cys Pro Leu Ser Pro
 115 120 125
 Gln Asp Pro Trp Ser Ser Pro Ser Leu Gly Arg Lys Pro Arg Gly Gly

130 135 140
 Gly Pro Gly Pro Gln Gly Cys Trp Glu Asp Met Gly Pro Val Cys Leu
 145 150 155 160
 Gln Leu Gly Gly Leu Gly Gly Ala Gly Asp Thr Arg Pro Gly Ala Gly
 165 170 175
 Gly Ala Gln Leu Arg Gly Arg Arg Arg Gly Leu Asp Glu Gly Gly Gly
 180 185 190
 Val Gln Trp Glu Gly Pro Cys
 195

<210> 4308

<211> 168

<212> PRT

<213> Homo sapiens

<400> 4308

Met Tyr Arg Val Met Trp Arg Glu Val Arg Arg Glu Val Gln Gln Thr
 1 5 10 15
 His Ala Val Cys Cys Gln Gly Trp Lys Lys Arg His Pro Gly Ala Leu
 20 25 30
 Thr Cys Glu Ala Ile Cys Ala Lys Pro Cys Leu Asn Gly Gly Val Cys
 35 40 45
 Val Arg Pro Asp Gln Cys Glu Cys Ala Pro Gly Trp Gly Gly Lys His
 50 55 60
 Cys His Val Asp Val Asp Glu Cys Arg Thr Ser Ile Thr Leu Cys Ser
 65 70 75 80
 His His Cys Phe Asn Thr Ala Gly Ser Phe Thr Cys Gly Cys Pro His
 85 90 95
 Asp Leu Val Leu Gly Val Asp Gly Arg Thr Cys Met Glu Gly Ser Pro
 100 105 110
 Glu Pro Pro Thr Ser Ala Ser Ile Leu Ser Val Ala Val Arg Glu Ala
 115 120 125
 Glu Lys Asp Glu Arg Ala Leu Lys Gln Glu Ile His Glu Leu Arg Gly
 130 135 140
 Arg Leu Glu Arg Leu Glu Gln Val Ser Gln Ala Cys Trp Val Gly Arg

145 150 155 160
 Gly Gln Thr Ser Leu Ser Ile Pro
 165

<210> 4309

<211> 148

<212> PRT

<213> Homo sapiens

<400> 4309

Met Ser Leu Leu Gly Pro Lys Val Leu Leu Phe Leu Ala Ala Phe Ile
 1 5 10 15
 Ile Thr Ser Asp Trp Ile Pro Leu Gly Val Asn Ser Gln Arg Gly Asp
 20 25 30
 Asp Val Thr Gln Ala Thr Pro Glu Thr Phe Thr Glu Asp Pro Asn Leu
 35 40 45
 Val Asn Asp Pro Ala Thr Asp Glu Thr Glu Cys Trp Asp Glu Lys Phe
 50 55 60
 Thr Cys Thr Arg Leu Tyr Ser Val His Arg Pro Val Lys Gln Cys Ile
 65 70 75 80
 His Gln Leu Cys Phe Thr Ser Leu Arg Arg Met Tyr Ile Val Asn Lys
 85 90 95
 Glu Ile Cys Ser Arg Leu Val Cys Lys Glu His Glu Ala Met Lys Asp
 100 105 110
 Glu Leu Cys Arg Gln Met Ala Gly Leu Pro Pro Arg Arg Leu Arg Arg
 115 120 125
 Ser Asn Tyr Phe Arg Leu Pro Pro Cys Glu Asn Val Asp Leu Gln Arg
 130 135 140
 Pro Asn Gly Leu
 145

<210> 4310

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4310

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Met Glu Leu Trp Gly Arg Met Leu Trp Ala Leu Leu Ser Gly Pro Gly
 1             5             10             15
Arg Arg Gly Ser Thr Arg Gly Trp Ala Phe Ser Ser Trp Gln Pro Gln
      20             25             30
Pro Pro Leu Ala Gly Leu Ser Ser Ala Ile Glu Leu Val Ser His Trp
      35             40             45
Thr Gly Val Phe Glu Lys Arg Gly Ile Pro Glu Ala Arg Glu Ser Ser
      50             55             60
Glu Tyr Ile Val Ala His Val Leu Gly Ala Lys Thr Val Lys Phe Ser
      65             70             75             80
Val Val Lys Arg Thr Gly Arg Gly Arg Arg Glu Asp Leu Gly Lys Gly
              85             90             95
Tyr Pro Gly Phe Leu Phe Thr Lys Ser Ala
      100             105

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<210> 4311

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4311

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Met Leu Leu Ala Gln Glu Glu Glu Glu Cys Arg Arg Glu Leu Leu Ser
 1             5             10             15
Trp Val Pro Val Pro Gln Pro Pro Arg Glu Ser Cys Leu Asp Leu Leu
      20             25             30
Val Asp Gln Pro His Ser Leu Leu Ser Ile Leu Asp Ala Gln Thr Trp
      35             40             45
Leu Ser Gln Ala Thr Asp His Thr Phe Leu Gln Arg Ser His Tyr His
      50             55             60
His Gly Asp His Pro Ser Tyr Ala Lys Pro Arg Leu Pro Leu Pro Val
      65             70             75             80
Phe Thr Val Arg His Tyr Ala Gly Thr Val Thr Tyr Gln Val Pro Gly

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85 90 95
 Leu Arg Asp Arg Pro Gly
 100

<210> 4312

<211> 388

<212> PRT

<213> Homo sapiens

<400> 4312

Met Asp Lys Arg Val Lys Lys Leu Pro Leu Met Ala Leu Ser Thr Thr
 1 5 10 15
 Met Ala Glu Ser Phe Lys Glu Leu Asp Pro Asp Ser Ser Met Gly Lys
 20 25 30
 Ala Leu Glu Met Ser Cys Ala Ile Gln Asn Gln Leu Ala Arg Ile Leu
 35 40 45
 Ala Glu Phe Glu Met Thr Leu Glu Arg Asp Val Leu Gln Pro Leu Ser
 50 55 60
 Arg Leu Ser Glu Glu Glu Leu Pro Ala Ile Leu Lys His Lys Lys Ser
 65 70 75 80
 Leu Gln Lys Leu Val Ser Asp Trp Asn Thr Leu Lys Ser Arg Leu Ser
 85 90 95
 Gln Ala Thr Lys Asn Ser Gly Ser Ser Gln Gly Leu Gly Gly Ser Pro
 100 105 110
 Gly Ser His Ser His Thr Thr Met Ala Asn Lys Val Glu Thr Leu Lys
 115 120 125
 Glu Glu Glu Glu Glu Leu Lys Arg Lys Val Glu Gln Cys Arg Asp Glu
 130 135 140
 Tyr Leu Ala Asp Leu Tyr His Phe Val Thr Lys Glu Asp Ser Tyr Ala
 145 150 155 160
 Asn Tyr Phe Ile Arg Leu Leu Glu Ile Gln Ala Asp Tyr His Arg Arg
 165 170 175
 Ser Leu Ser Ser Leu Asp Thr Ala Leu Ala Glu Leu Arg Glu Asn His
 180 185 190

Gly Gln Ala Asp His Ser Pro Ser Met Thr Ala Thr His Phe Pro Arg
 195 200 205
 Val Tyr Gly Val Ser Leu Ala Thr His Leu Gln Glu Leu Gly Arg Glu
 210 215 220
 Ile Ala Leu Pro Ile Glu Ala Cys Val Met Met Leu Leu Ser Glu Gly
 225 230 235 240
 Met Lys Glu Glu Gly Leu Phe Arg Leu Ala Ala Gly Ala Ser Val Leu
 245 250 255
 Lys Arg Leu Lys Gln Thr Met Ala Ser Asp Pro His Ser Leu Glu Glu
 260 265 270
 Phe Cys Ser Asp Pro His Ala Val Ala Gly Ala Leu Lys Ser Tyr Leu
 275 280 285
 Arg Glu Leu Pro Glu Pro Leu Met Thr Phe Asp Leu Tyr Asp Asp Trp
 290 295 300
 Met Arg Ala Ala Ser Leu Lys Glu Pro Gly Ala Arg Leu Gln Ala Leu
 305 310 315 320
 Gln Glu Val Cys Ser Arg Leu Pro Pro Glu Asn Leu Ser Asn Leu Arg
 325 330 335
 Tyr Leu Met Lys Phe Leu Ala Arg Leu Ala Glu Glu Gln Glu Val Asn
 340 345 350
 Lys Met Thr Pro Ser Asn Ile Ala Ile Val Leu Gly Pro Asn Leu Leu
 355 360 365
 Trp Pro Pro Glu Lys Glu Gly Thr Glu Pro Ala Arg Glu Leu Gly Ser
 370 375 380
 Gln Thr Leu Cys
 385

<210> 4313

<211> 140

<212> PRT

<213> Homo sapiens

<400> 4313

Met Trp Pro Phe Arg Leu Arg Cys Pro Ile Tyr Phe Lys Thr Arg Leu
 1 5 10 15

Leu Tyr Ser Ser Ser Gln Asp Gly Phe Leu Ser Ser Ser Thr Asn Tyr
 20 25 30
 Tyr Asn His Arg Thr Tyr Pro Gly Leu Val Asn Trp Leu Phe Val Leu
 35 40 45
 Thr Glu Pro Glu Leu Thr Gly Glu Leu Gly Asp Asp Asp Arg Lys Gly
 50 55 60
 Met His Thr Gly Gly Ile Ile Arg Trp Leu Gly Arg Pro Ser Ser Gln
 65 70 75 80
 Leu Lys Pro Ile Phe His Ala Glu Glu Arg Arg Val Pro Pro Pro Pro
 85 90 95
 Glu Arg Leu Val Gly Arg Ala Ser Pro Arg Glu Gln Ala Thr Val Phe
 100 105 110
 Lys Arg Ile Cys Ala Pro Leu His Ala Glu Val Phe Cys Arg Ala Gly
 115 120 125
 Leu Cys Ala Cys His Pro Asp Cys Thr Ala Ala Gly
 130 135 140

<210> 4314

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4314

Met Cys Arg Leu Arg Glu Thr Ala Leu Ala Val Pro Gly Pro Pro Pro
 1 5 10 15
 Leu Gly Thr Asp Pro Trp Gly Ala Pro Phe Pro Pro Ser Phe Val Ser
 20 25 30
 Ser Phe Phe Phe Phe Phe Phe Ser Glu Thr Glu Ser His Ser Val Ser
 35 40 45
 Gln Ala Gly Val Gln Trp His Asp Ile Ser Ser Leu Gln Pro Pro Pro
 50 55 60
 Ala Gly Leu Lys Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp
 65 70 75 80
 Tyr Arg Ser Thr Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser Arg

85 90 95
 Asp Gly Val Ser Leu Cys Trp Pro Gly Trp Ser Pro Thr Pro Asp Leu
 100 105 110
 Gly

<210> 4315

<211> 379

<212> PRT

<213> Homo sapiens

<400> 4315

Met Pro Lys His Pro Asn Ser Leu Ser Gly Lys Gly Thr Gln Leu Val
 1 5 10 15
 Pro Ser Ser His Leu Pro Pro Pro Lys Leu Arg Ile Pro Asn Val Phe
 20 25 30
 Ser Ile Ser Val Ala Leu Ala Lys Arg His Leu Ser Gln Pro Gln Leu
 35 40 45
 Ser Ser Asp Arg Met Phe Gly Thr Asn Arg Asn Ala Ile Ser Met Ile
 50 55 60
 Arg Pro Leu Arg Pro Gln Glu Thr Asp Leu Asp Leu Val Asp Gly Asp
 65 70 75 80
 Ser Thr Glu Val Leu Glu Asn Met Asp Thr Ser Cys Asp Asp Gly Leu
 85 90 95
 Phe Ser Tyr Asp Ser Leu Asp Ser Pro Asn Ser Asp Asp Gln Glu His
 100 105 110
 Cys Asp Ser Ala Lys Lys Val Ala Tyr Ser Lys Pro Pro Thr Pro Pro
 115 120 125
 Leu His Arg Phe Pro Ser Trp Glu Ser Arg Ile Tyr Ala Val Ala Lys
 130 135 140
 Ser Gly Ile Arg Met Ser Glu Ala Phe Asn Met Glu Ser Val Asn Lys
 145 150 155 160
 Asn Ser Ala Ala Thr Leu Ser Tyr Thr Thr Ser Gly Leu Tyr Thr Ser
 165 170 175
 Leu Ile Tyr Lys Asn Met Thr Thr Pro Val Tyr Thr Thr Leu Lys Gly

180	185	190	
Lys Ala Thr Gln Ile Ser Ser Ser Pro Phe Leu Asp Asp Ser Ser Gly			
195	200	205	
Ser Glu Glu Glu Asp Ser Ser Arg Ser Ser Ser Arg Thr Ser Glu Ser			
210	215	220	
Asp Ser Arg Ser Arg Ser Gly Pro Gly Ser Pro Arg Ala Met Lys Arg			
225	230	235	240
Gly Val Ser Leu Ser Ser Val Ala Ser Glu Ser Asp Tyr Ala Ile Pro			
245	250	255	
Pro Asp Ala Tyr Ser Thr Asp Thr Glu Tyr Ser Gln Pro Glu Gln Lys			
260	265	270	
Leu Pro Lys Thr Cys Ser Ser Ser Ser Asp Asn Gly Lys Asn Glu Pro			
275	280	285	
Leu Glu Lys Ser Gly Tyr Leu Leu Lys Met Ser Gly Lys Val Lys Ser			
290	295	300	
Trp Lys Arg Arg Trp Phe Val Leu Lys Gly Gly Glu Leu Leu Tyr Tyr			
305	310	315	320
Lys Ser Pro Ser Asp Val Ile Arg Lys Pro Gln Gly His Ile Glu Leu			
325	330	335	
Ser Ala Ser Cys Ser Ile Leu Arg Gly Asp Asn Lys Gln Thr Val Gln			
340	345	350	
Val Leu Asn Phe Phe Phe Phe Phe Phe Phe Leu Tyr His Ala Arg Leu			
355	360	365	
Asn Ser Gln Leu Ser Asn Leu Met Glu Arg Arg			
370	375		

<210> 4316

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4316

Met Val Phe Pro Arg Leu Phe Thr Cys Pro Thr Leu Glu Thr Thr Asn

1

5

10

15

Phe Lys Val Gly Lys Trp His Ser Pro Pro Ala Leu Met Gly Pro Trp
 20 25 30
 Glu Gly Pro Leu Ser Ala Arg Ala Cys Cys Gly Ser Gln Ser Ser Glu
 35 40 45
 Pro Ala Ala Leu Arg Ser Leu Ser Ala Arg Ala Cys His Arg Pro Tyr
 50 55 60
 Ser Ser Glu Pro Ala Ala Leu Arg Leu Leu Asn Lys Thr Leu Leu Arg
 65 70 75 80
 Ser Cys Cys Ala Ala Gln Gly Thr His Pro Gln Ala Val Leu Val Leu
 85 90 95
 Val Gly Leu Pro Leu Ser His Gly Glu Thr His Arg Pro Thr Ser Val
 100 105 110

<210> 4317

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4317

Met Ala Ser Met Gly Leu Gln Val Met Gly Ile Ala Leu Ala Val Leu
 1 5 10 15
 Gly Trp Leu Ala Val Met Leu Cys Cys Ala Leu Pro Met Trp Arg Val
 20 25 30
 Thr Ala Phe Ile Gly Ser Asn Ile Val Thr Ser Gln Thr Ile Trp Glu
 35 40 45
 Gly Leu Trp Met Asn Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
 50 55 60
 Lys Val Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
 65 70 75 80
 Arg Ala Leu Val Ile Ile Ser Ile Ile Val Ala Ala Leu Gly Val Leu
 85 90 95
 Leu Ser Val Val Gly Gly Lys Cys Thr Asn Cys Leu Glu Asp Glu Ser
 100 105 110
 Ala Lys Ala Lys Thr Met Ile Val Ala Gly Val Val Phe Leu Leu Ala
 115 120 125

Gly Leu Met Val Ile Val Pro Val Ser Trp Thr Ala His Asn Ile Ile
 130 135 140
 Gln Asp Phe Tyr Asn Pro Leu Val Ala Ser Gly Gln Lys Arg Glu Met
 145 150 155 160
 Gly Ala Ser Leu Tyr Val Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
 165 170 175
 Gly Gly Gly Leu Leu Cys Cys Asn Ser Pro Pro Arg Thr Asp Lys Pro
 180 185 190
 Tyr Ser Ala Lys Tyr Ser Ala Ala Arg Ser Ala Ala Ala Ser Asn Tyr
 195 200 205
 Val

<210> 4318

<211> 559

<212> PRT

<213> Homo sapiens

<400> 4318

Met Pro Ser Gly Lys Trp Glu Ala Trp Gly Tyr Gly Lys Asp Gly Thr
 1 5 10 15
 Gly Ser Arg Lys Ala Gln Glu Lys Asn Ser Gly Ala Asn Ser Ser Ser
 20 25 30
 Leu Ser Thr Ala Ser Ala Pro Gly Ala Ala Pro Leu Thr Ile Ser Ser
 35 40 45
 Pro Leu His Val Pro Ser Ser Leu Pro Gly Pro Ala Ser Ser Pro Met
 50 55 60
 Pro Ile Pro Asn Ser Ser Pro Leu Ala Ser Pro Val Ser Ser Thr Val
 65 70 75 80
 Ser Val Pro Leu Ser Ser Ser Leu Pro Ile Ser Val Pro Thr Thr Leu
 85 90 95
 Pro Ala Pro Ala Ser Ala Pro Leu Thr Ile Pro Ile Ser Ala Pro Leu
 100 105 110
 Thr Val Ser Ala Ser Gly Pro Ala Leu Leu Thr Ser Val Thr Pro Pro
 115 120 125

Leu Ala Pro Val Val Pro Ala Ala Pro Gly Pro Pro Ser Leu Ala Pro
 130 135 140
 Ser Gly Ala Ser Pro Ser Ala Ser Ala Leu Thr Leu Gly Leu Ala Thr
 145 150 155 160
 Ala Pro Ser Leu Ser Ser Ser Gln Thr Pro Gly His Pro Leu Leu Leu
 165 170 175
 Ala Pro Thr Ser Ser His Val Pro Gly Leu Asn Ser Thr Val Ala Pro
 180 185 190
 Ala Cys Ser Pro Val Leu Val Pro Ala Ser Ala Leu Ala Ser Pro Phe
 195 200 205
 Pro Ser Ala Pro Asn Pro Ala Pro Ala Gln Ala Ser Leu Leu Ala Pro
 210 215 220
 Ala Ser Ser Ala Ser Gln Ala Leu Ala Thr Pro Leu Ala Pro Met Ala
 225 230 235 240
 Ala Pro Gln Thr Ala Ile Leu Ala Pro Ser Pro Ala Pro Pro Leu Ala
 245 250 255
 Pro Leu Pro Val Leu Ala Pro Ser Pro Gly Ala Ala Pro Val Leu Ala
 260 265 270
 Ser Ser Gln Thr Pro Val Pro Val Met Ala Pro Ser Ser Thr Pro Gly
 275 280 285
 Thr Ser Leu Ala Ser Ala Ser Pro Val Pro Ala Pro Thr Pro Val Leu
 290 295 300
 Ala Pro Ser Ser Thr Gln Thr Met Leu Pro Ala Pro Val Pro Ser Pro
 305 310 315 320
 Leu Pro Ser Pro Ala Ser Thr Gln Thr Leu Ala Leu Ala Pro Ala Leu
 325 330 335
 Ala Pro Thr Leu Gly Gly Ser Ser Pro Ser Gln Thr Leu Ser Leu Gly
 340 345 350
 Thr Gly Asn Pro Gln Gly Pro Phe Pro Thr Gln Thr Leu Ser Leu Thr
 355 360 365
 Pro Ala Ser Ser Leu Val Pro Thr Pro Ala Gln Thr Leu Ser Leu Ala
 370 375 380
 Pro Gly Pro Pro Leu Gly Pro Thr Gln Thr Leu Ser Leu Ala Pro Ala
 385 390 395 400
 Pro Pro Leu Ala Pro Ala Ser Pro Val Gly Pro Ala Pro Ala His Thr
 405 410 415

Leu Thr Leu Ala Pro Ala Ser Ser Ser Ala Ser Leu Leu Ala Pro Ala
 420 425 430
 Ser Val Gln Thr Leu Thr Leu Ser Pro Ala Pro Val Pro Thr Leu Gly
 435 440 445
 Pro Ala Ala Ala Gln Thr Leu Ala Leu Ala Pro Ala Ser Thr Gln Ser
 450 455 460
 Pro Ala Ser Gln Ala Ser Ser Leu Val Val Ser Ala Ser Gly Ala Ala
 465 470 475 480
 Pro Leu Pro Val Thr Met Val Ser Arg Leu Pro Val Ser Lys Tyr Glu
 485 490 495
 Pro Asp Thr Leu Thr Leu Arg Ser Gly Pro Pro Ser Pro Pro Ser Thr
 500 505 510
 Ala Thr Ser Phe Gly Gly Pro Arg Pro Arg Arg Gln Pro Pro Pro Pro
 515 520 525
 Pro Arg Ser Pro Phe Tyr Leu Val Ser Phe Thr Ser Ser Arg Gly Asn
 530 535 540
 Arg Lys Leu Ser Phe Phe Gly Val Leu Val Gly Trp Met Glu Gln
 545 550 555

<210> 4319

<211> 962

<212> PRT

<213> Homo sapiens

<400> 4319

Met Asp Thr Asp Leu Tyr Asp Glu Phe Gly Asn Tyr Ile Gly Pro Glu
 1 5 10 15
 Leu Asp Ser Asp Glu Asp Asp Asp Glu Leu Gly Arg Glu Thr Lys Asp
 20 25 30
 Leu Asp Glu Met Asp Asp Asp Asp Asp Asp Asp Val Gly Asp His
 35 40 45
 Asp Asp Asp His Pro Gly Met Glu Val Val Leu His Glu Val Tyr Gly
 50 55 60
 Pro Glu Val Glu Thr Ile Val Gln Glu Glu Asp Thr Gln Pro Leu Thr
 65 70 75 80

Glu Pro Ile Ile Lys Pro Val Lys Thr Lys Lys Phe Thr Leu Met Glu
 85 90 95
 Gln Thr Leu Pro Val Thr Val Tyr Glu Met Asp Phe Leu Ala Asp Leu
 100 105 110
 Met Asp Asn Ser Glu Leu Ile Arg Asn Val Thr Leu Cys Gly His Leu
 115 120 125
 His His Gly Lys Thr Cys Phe Val Asp Cys Leu Ile Glu Gln Thr His
 130 135 140

Pro Glu Ile Arg Lys Arg Tyr Asp Gln Asp Leu Cys Tyr Thr Asp Ile
 145 150 155 160
 Leu Phe Thr Glu Gln Glu Arg Gly Val Gly Ile Lys Ser Thr Pro Val
 165 170 175
 Thr Val Val Leu Pro Asp Thr Lys Gly Lys Ser Tyr Leu Phe Asn Ile
 180 185 190
 Met Asp Thr Pro Gly His Val Asn Phe Ser Asp Glu Val Thr Ala Gly
 195 200 205
 Leu Arg Ile Ser Asp Gly Val Val Leu Phe Ile Asp Ala Ala Glu Gly
 210 215 220
 Val Met Leu Asn Thr Glu Arg Leu Ile Lys His Ala Val Gln Glu Arg
 225 230 235 240
 Leu Ala Val Thr Val Cys Ile Asn Lys Ile Asp Arg Leu Ile Leu Glu
 245 250 255
 Leu Lys Leu Pro Pro Thr Asp Ala Tyr Tyr Lys Leu Arg His Ile Val
 260 265 270
 Asp Glu Val Asn Gly Leu Ile Ser Met Tyr Ser Thr Asp Glu Asn Leu
 275 280 285
 Ile Leu Ser Pro Leu Leu Gly Asn Val Cys Phe Ser Ser Ser Gln Tyr
 290 295 300
 Ser Ile Cys Phe Thr Leu Gly Ser Phe Ala Lys Ile Tyr Ala Asp Thr
 305 310 315 320
 Phe Gly Asp Ile Asn Tyr Gln Glu Phe Ala Lys Arg Leu Trp Gly Asp
 325 330 335
 Ile Tyr Phe Asn Pro Lys Thr Arg Lys Phe Thr Lys Lys Ala Pro Thr
 340 345 350
 Ser Ser Ser Gln Arg Ser Phe Val Glu Phe Ile Leu Glu Pro Leu Tyr

355	360	365
Lys Ile Leu Ala Gln Val Val Gly Asp Val Asp Thr Ser Leu Pro Arg		
370	375	380
Thr Leu Asp Glu Leu Gly Ile His Leu Thr Lys Glu Glu Leu Lys Leu		
385	390	395
Asn Ile Arg Pro Leu Leu Arg Leu Val Cys Lys Lys Phe Phe Gly Glu		
405	410	415
Phe Thr Gly Phe Val Asp Met Cys Val Gln His Ile Pro Ser Pro Lys		
420	425	430
Val Gly Ala Lys Pro Lys Ile Glu His Thr Tyr Thr Gly Gly Val Asp		
435	440	445
Ser Asp Leu Gly Glu Ala Met Ser Asp Cys Asp Pro Asp Gly Pro Leu		
450	455	460
Met Cys His Thr Thr Lys Met Tyr Ser Thr Asp Asp Gly Val Gln Phe		
465	470	475
His Ala Phe Gly Arg Val Leu Ser Gly Thr Ile His Ala Gly Gln Pro		
485	490	495
Val Lys Val Leu Gly Glu Asn Tyr Thr Leu Glu Asp Glu Glu Asp Ser		
500	505	510
Gln Ile Cys Thr Val Gly Arg Leu Trp Ile Ser Val Ala Arg Tyr His		
515	520	525
Ile Glu Val Asn Arg Val Pro Ala Gly Asn Trp Val Leu Ile Glu Gly		
530	535	540
Val Asp Gln Pro Ile Val Lys Thr Ala Thr Ile Thr Glu Pro Arg Gly		
545	550	555
Asn Glu Glu Ala Gln Ile Phe Arg Pro Leu Lys Phe Asn Thr Thr Ser		
565	570	575
Val Ile Lys Ile Ala Val Glu Pro Val Asn Pro Ser Glu Leu Pro Lys		
580	585	590
Met Leu Asp Gly Leu Arg Lys Val Asn Lys Ser Tyr Pro Ser Leu Thr		
595	600	605
Thr Lys Val Glu Glu Ser Gly Glu His Val Ile Leu Gly Thr Gly Glu		
610	615	620
Leu Tyr Leu Asp Cys Val Met His Asp Leu Arg Lys Met Tyr Ser Glu		
625	630	635
Ile Asp Ile Lys Val Ala Asp Pro Val Val Thr Phe Cys Glu Thr Val		

	645		650		655
Val	Glu Thr Ser Ser Leu Lys Cys Phe	Ala Glu Thr Pro Asn Lys Lys			
	660		665		670
Asn	Lys Ile Thr Met Ile Ala Glu Pro Leu Glu Lys Gly Leu Ala Glu				
	675		680		685
Asp	Ile Glu Asn Glu Val Val Gln Ile Thr Trp Asn Arg Lys Lys Leu				
	690		695		700
Gly	Glu Phe Phe Gln Thr Lys Tyr Asp Trp Asp Leu Leu Ala Ala Arg				
705		710		715	720
Ser	Ile Trp Ala Phe Gly Pro Asp Ala Thr Gly Pro Asn Ile Leu Val				
	725		730		735
Asp	Asp Thr Leu Pro Ser Glu Val Asp Lys Ala Leu Leu Gly Ser Val				
	740		745		750
Lys	Asp Ser Ile Val Gln Gly Phe Gln Trp Gly Thr Arg Glu Gly Pro				
	755		760		765
Leu	Cys Asp Glu Leu Ile Arg Asn Val Lys Phe Lys Ile Leu Asp Ala				
	770		775		780
Val	Val Ala Gln Glu Pro Leu His Arg Gly Gly Gly Gln Ile Ile Pro				
785		790		795	800
Thr	Ala Arg Arg Val Val Tyr Ser Ala Phe Leu Met Ala Thr Pro Arg				
	805		810		815
Leu	Met Glu Pro Tyr Tyr Phe Val Glu Val Gln Ala Pro Ala Asp Cys				
	820		825		830
Val	Ser Ala Val Tyr Thr Val Leu Ala Arg Arg Arg Gly His Val Thr				
	835		840		845
Gln	Asp Ala Pro Ile Pro Gly Ser Pro Leu Tyr Thr Ile Lys Ala Phe				
	850		855		860
Ile	Pro Ala Ile Asp Ser Phe Gly Phe Glu Thr Asp Leu Arg Thr His				
865		870		875	880
Thr	Gln Gly Gln Ala Phe Ser Leu Ser Val Phe His His Trp Gln Ile				
	885		890		895
Val	Pro Gly Asp Pro Leu Asp Lys Ser Ile Val Ile Arg Pro Leu Glu				
	900		905		910
Pro	Gln Pro Ala Pro His Leu Ala Arg Glu Phe Met Ile Lys Thr Arg				
	915		920		925
Arg	Arg Lys Gly Leu Ser Glu Asp Val Ser Ile Ser Lys Phe Phe Asp				

930	935	940	
Asp Pro Met Leu Leu Glu Leu Ala Lys Gln Asp Val Val Leu Asn Tyr			
945	950	955	960
Pro Met			

<210> 4320

<211> 281

<212> PRT

<213> Homo sapiens

<400> 4320

Met Arg Phe Val Val Ala Leu Val Leu Leu Asn Val Ala Ala Ala Gly			
1	5	10	15
Ala Val Pro Leu Leu Ala Thr Glu Ser Val Lys Gln Glu Glu Ala Gly			
20	25	30	
Val Arg Pro Ser Ala Gly Asn Val Ser Thr His Pro Ser Leu Ser Gln			
35	40	45	
Arg Pro Gly Gly Ser Thr Lys Ser His Pro Glu Pro Gln Thr Pro Lys			
50	55	60	
Asp Ser Pro Ser Lys Ser Gly Ser Glu Ala Gln Thr Thr Lys Asp Val			
65	70	75	80
Pro Asn Lys Ser Gly Ala Asp Gly Gln Thr Pro Lys Asp Gly Ser Ser			
85	90	95	
Lys Ser Gly Ala Glu Asp Gln Thr Pro Lys Asp Val Pro Asn Lys Ser			
100	105	110	
Gly Ala Glu Lys Gln Thr Pro Lys Asp Gly Ser Asn Lys Ser Gly Ala			
115	120	125	
Glu Glu Gln Gly Pro Ile Asp Gly Pro Ser Lys Ser Gly Ala Glu Glu			
130	135	140	
Gln Thr Ser Lys Asp Ser Pro Asn Lys Glu Glu Val Lys Ser Ser Glu			
145	150	155	160
Pro Thr Glu Asp Val Glu Pro Lys Glu Ala Glu Asp Asp Asp Thr Gly			
165	170	175	
Pro Glu Glu Gly Ser Pro Pro Lys Glu Glu Lys Glu Lys Met Ser Gly			

180	185	190
Ser Ala Ser Ser Glu Asn Arg Glu Gly Thr Leu Ser Asp Ser Thr Gly		
195	200	205
Ser Glu Lys Asp Asp Leu Tyr Pro Asn Gly Ser Gly Asn Gly Ser Ala		
210	215	220
Glu Ser Ser His Phe Phe Ala Tyr Leu Val Thr Ala Ala Ile Leu Val		
225	230	235
Ala Val Leu Tyr Ile Ala His His Asn Lys Arg Lys Ile Ile Ala Phe		
245	250	255
Val Leu Glu Gly Lys Arg Ser Lys Val Thr Arg Arg Pro Lys Ala Ser		
260	265	270
Asp Tyr Gln Arg Leu Asp Gln Lys Ser		
275	280	

<210> 4321

<211> 647

<212> PRT

<213> Homo sapiens

<400> 4321

Met Ala Ala Ile Leu Gly Asp Thr Ile Met Val Ala Lys Gly Leu Val		
1	5	10
Lys Leu Thr Gln Ala Ala Val Glu Thr His Leu Gln His Leu Gly Ile		
20	25	30
Gly Gly Glu Leu Ile Met Ala Ala Arg Ala Leu Gln Ser Thr Ala Val		
35	40	45
Glu Gln Ile Gly Met Phe Leu Gly Lys Val Gln Gly Gln Asp Lys His		
50	55	60
Glu Glu Tyr Phe Ala Glu Asn Phe Gly Gly Pro Glu Gly Glu Phe His		
65	70	75
Phe Ser Val Pro His Ala Ala Gly Ala Ser Thr Asp Phe Ser Ser Ala		
85	90	95
Ser Ala Pro Asp Gln Ser Ala Pro Pro Ser Leu Gly His Ala His Ser		
100	105	110
Glu Gly Pro Ala Pro Ala Tyr Val Ala Ser Gly Pro Phe Arg Glu Ala		

115	120	125	
Gly Phe Pro Gly Gln Ala Ser	Ser Pro Leu Gly Arg Ala Asn Gly Arg		
130	135	140	
Leu Phe Ala Asp Pro Arg Asp Ser Phe Ser Ala Met Gly Phe Gln Arg			
145	150	155	160
Arg Phe Phe His Gln Asp Gln Ser Pro Val Gly Gly Leu Thr Ala Glu			
165	170	175	
Asp Ile Glu Lys Ala Arg Gln Ala Lys Ala Arg Pro Glu Asn Lys Gln			
180	185	190	
His Lys Gln Thr Leu Ser Glu His Ala Arg Glu Arg Lys Val Pro Val			
195	200	205	
Thr Arg Ile Gly Arg Leu Ala Asn Phe Gly Gly Leu Ala Val Gly Leu			
210	215	220	
Gly Phe Gly Ala Leu Ala Glu Val Ala Lys Lys Ser Leu Arg Ser Glu			
225	230	235	240
Asp Pro Ser Gly Lys Lys Ala Val Leu Gly Ser Ser Pro Phe Leu Ser			
245	250	255	
Glu Ala Asn Ala Glu Arg Ile Val Arg Thr Leu Cys Lys Val Arg Gly			
260	265	270	
Ala Ala Leu Lys Leu Gly Gln Met Leu Ser Ile Gln Asp Asp Ala Phe			
275	280	285	
Ile Asn Pro His Leu Ala Lys Ile Phe Glu Arg Val Arg Gln Ser Ala			
290	295	300	
Asp Phe Met Pro Leu Lys Gln Met Met Lys Thr Leu Asn Asn Asp Leu			
305	310	315	320
Gly Pro Asn Trp Arg Asp Lys Leu Glu Tyr Phe Glu Glu Arg Pro Phe			
325	330	335	
Ala Ala Ala Ser Ile Gly Gln Val His Leu Ala Arg Met Lys Gly Gly			
340	345	350	
Arg Glu Val Ala Met Lys Ile Gln Tyr Pro Gly Val Ala Gln Ser Ile			
355	360	365	
Asn Ser Asp Val Asn Asn Leu Met Ala Val Leu Asn Met Ser Asn Met			
370	375	380	
Leu Pro Glu Gly Leu Phe Pro Glu His Leu Ile Asp Val Leu Arg Arg			
385	390	395	400
Glu Leu Ala Leu Glu Cys Asp Tyr Gln Arg Glu Ala Ala Cys Ala Arg			

	405		410		415
Lys Phe Arg Asp Leu Leu Lys Gly His Pro Phe Phe Tyr Val Pro Glu					
	420		425		430
Ile Val Asp Glu Leu Cys Ser Pro His Val Leu Thr Thr Glu Leu Val					
	435		440		445
Ser Gly Phe Pro Leu Asp Gln Ala Glu Gly Leu Ser Gln Glu Ile Arg					
	450		455		460
Asn Glu Ile Cys Tyr Asn Ile Leu Val Leu Cys Leu Arg Glu Leu Phe					
465		470		475	480
Glu Phe His Phe Met Gln Thr Asp Pro Asn Trp Ser Asn Phe Phe Tyr					
	485		490		495
Asp Pro Gln Gln His Lys Val Ala Leu Leu Asp Phe Gly Ala Thr Arg					
	500		505		510
Glu Tyr Asp Arg Ser Phe Thr Asp Leu Tyr Ile Gln Ile Ile Arg Ala					
	515		520		525
Ala Ala Asp Arg Asp Arg Glu Thr Val Arg Ala Lys Ser Ile Glu Met					
	530		535		540
Lys Phe Leu Thr Gly Tyr Glu Val Lys Val Met Glu Asp Ala His Leu					
545		550		555	560
Asp Ala Ile Leu Ile Leu Gly Glu Ala Phe Ala Ser Asp Glu Pro Phe					
	565		570		575
Asp Phe Gly Thr Gln Ser Thr Thr Glu Lys Ile His Asn Leu Ile Pro					
	580		585		590
Val Met Leu Arg His Arg Leu Val Pro Pro Pro Glu Glu Thr Tyr Ser					
	595		600		605
Leu His Arg Lys Met Gly Gly Ser Phe Leu Ile Cys Ser Lys Leu Lys					
	610		615		620
Ala Arg Phe Pro Cys Lys Ala Met Phe Glu Glu Ala Tyr Ser Asn Tyr					
625		630		635	640
Cys Lys Arg Gln Ala Gln Gln					
	645				

<210> 4322

<211> 419

<212> PRT

<213> Homo sapiens

<400> 4322

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Met Ser Arg Gly Thr Arg Glu Ser Ala Cys Cys Met Leu Thr Ser Trp
  1             5             10             15
Ala Ser Arg Gly Trp Pro Ala Ser Val Pro Leu Arg Ser Trp Cys Ser
      20             25             30
Cys Ser Met Ser Ser Leu Ala Ser Ser Thr Arg Leu Pro Arg Lys Leu
      35             40             45
Arg Ala Ala Thr Gly Val Asp Ile Asn Met Arg Val Gly Val His Ser
      50             55             60
Gly Ser Val Leu Cys Gly Val Ile Gly Leu Gln Lys Trp Gln Tyr Asp
      65             70             75             80
Val Trp Ser His Asp Val Thr Leu Ala Asn His Met Glu Ala Gly Gly
      85             90             95
Val Pro Gly Arg Val His Ile Thr Gly Ala Thr Leu Ala Leu Leu Ala
      100            105            110
Gly Ala Tyr Ala Val Glu Asp Ala Gly Met Glu His Arg Asp Pro Tyr
      115            120            125
Leu Arg Glu Leu Gly Glu Pro Thr Tyr Leu Val Ile Asp Pro Arg Ala
      130            135            140
Glu Glu Glu Asp Glu Lys Gly Thr Ala Gly Gly Leu Leu Ser Ser Leu
      145            150            155            160
Glu Gly Leu Lys Met Arg Pro Ser Leu Leu Met Thr Arg Tyr Leu Glu
      165            170            175
Ser Trp Gly Ala Ala Lys Pro Phe Ala His Leu Ser His Gly Asp Ser
      180            185            190
Pro Val Ser Thr Ser Thr Pro Leu Pro Glu Lys Thr Leu Ala Ser Phe
      195            200            205
Ser Thr Gln Trp Ser Leu Asp Arg Ser Arg Thr Pro Arg Gly Leu Asp
      210            215            220
Asp Glu Leu Asp Thr Gly Asp Ala Lys Phe Phe Gln Val Ile Glu Gln
      225            230            235            240
Leu Asn Ser Gln Lys Gln Trp Lys Gln Ser Lys Asp Phe Asn Pro Leu
      245            250            255

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Thr Leu Tyr Phe Arg Glu Lys Glu Met Glu Lys Glu Tyr Arg Leu Ser
 260 265 270
 Ala Ile Pro Ala Phe Lys Tyr Tyr Glu Ala Cys Thr Phe Leu Val Phe
 275 280 285
 Leu Ser Asn Phe Ile Ile Gln Met Leu Val Thr Asn Arg Pro Pro Ala
 290 295 300
 Leu Ala Ile Thr Tyr Ser Ile Thr Phe Leu Leu Phe Leu Leu Ile Leu
 305 310 315 320
 Phe Val Cys Phe Ser Glu Asp Leu Met Arg Cys Val Leu Lys Gly Pro
 325 330 335
 Lys Met Leu His Trp Leu Pro Ala Leu Ser Gly Leu Val Ala Thr Arg
 340 345 350
 Pro Gly Leu Arg Ile Ala Leu Gly Thr Ala Thr Ile Leu Leu Val Phe
 355 360 365
 Ala Met Ala Ile Thr Ser Leu Phe Phe Phe Pro Thr Ser Ser Asp Cys
 370 375 380
 Pro Phe Gln Ala Pro Asn Val Ser Ser Met Ile Ser Asn Leu Ser Trp
 385 390 395 400
 Glu Leu Pro Gly Ser Leu Pro Leu Ile Ser Val Pro Val Ser Val Pro
 405 410 415
 Thr Cys Pro

<210> 4323

<211> 101

<212> PRT

<213> Homo sapiens

<400> 4323

Met Ala His Val Ala Glu Lys Asp Gly Leu Asp Trp Ala Ser Gly Cys
 1 5 10 15
 Ile Pro Gly Leu Gln Thr Gly Ile Cys Leu Phe Gly Ser Gln Leu Cys
 20 25 30
 Phe His Leu Ser Trp Leu Tyr Ser Trp Ala Ser Gln Cys Gly Pro Thr
 35 40 45

Ala Pro Val Ile Asp Lys Lys Ser Ser Pro Leu Leu Thr Glu Leu Leu
 50 55 60
 Asp Leu Val Leu Ile Gly Pro Asp Glu Glu Gly Ile Gln Pro Gln Val
 65 70 75 80
 Ile Ile Val Ala Arg Lys Met Glu Tyr Thr Lys Trp Thr Gly Leu Ala
 85 90 95
 Cys Thr His Arg Asp
 100

<210> 4324

<211> 224

<212> PRT

<213> Homo sapiens

<400> 4324

Met Val Cys Leu Val Leu Leu Asn His Pro Lys Glu Leu Asn Met Ala
 1 5 10 15
 Lys Gln Met Val Lys Ala Ser Arg Leu Phe Tyr Phe Gly Ser Ala Arg
 20 25 30
 Ser Pro Leu Thr Cys Asp Leu Cys Cys Pro Ser Arg Trp Ser Gln Ala
 35 40 45
 Ile Gln Pro Cys Pro Leu Pro Leu Cys Pro Asp Ala Ser Gly Ala Arg
 50 55 60
 Leu Phe Arg Leu Ala Leu Thr Ser Gly Arg Gln Ser Thr Leu Arg Asp
 65 70 75 80
 Val Ala Asn Thr Thr Pro Pro Val Leu Ser Val Gly Arg Ala Glu Ala
 85 90 95
 Ala Trp Glu Ala Arg Gly Asp Arg Lys Arg Ala Leu Ser Ser Ser Glu
 100 105 110
 Lys Arg Ile Cys His Gln Ile Glu Phe Arg Pro Leu Ser Leu Phe Gly
 115 120 125
 Arg Met Val Gln Ile Gln Ile Lys Val Val Thr Gln Pro Glu Met Ser
 130 135 140
 Gly Lys Ala Phe Cys Arg Glu Asn Val Pro Pro Pro Ala Ile Cys Ser
 145 150 155 160

Gln Val Cys Ala Thr Arg Gln Pro Ser Arg Asn Ile Val Trp Ile Leu
 165 170 175
 Lys Met Cys Leu Phe Leu Phe Leu Asn His Phe Ile Thr Tyr Phe Leu
 180 185 190
 Ile Tyr Phe Val Met Ser Cys Phe Glu Val Leu Leu Leu Ser Leu Leu
 195 200 205
 Ser Phe Pro Leu Phe Leu Ser Leu Ile Tyr Phe Val Lys Val Val His
 210 215 220

<210> 4325

<211> 1192

<212> PRT

<213> Homo sapiens

<400> 4325

Met Leu Asp Gly Ala Arg Leu Glu Gly Asp Leu Ser Leu Ala His Glu

 1 5 10 15
 Asp Val Ala Gly Lys Asp Ser Lys Phe Gln Gly Pro Lys Leu Ser Thr
 20 25 30
 Ser Gly Phe Glu Trp Ser Ser Lys Lys Val Ser Met Ser Ser Ser Glu
 35 40 45
 Ile Glu Gly Asn Val Thr Phe His Glu Lys Thr Ser Ala Phe Pro Ile
 50 55 60
 Val Glu Ser Val Val His Glu Gly Asp Leu His Asp Pro Ser Arg Asp
 65 70 75 80
 Gly Asn Leu Gly Leu Ala Val Gly Glu Val Gly Met Asp Ser Lys Phe
 85 90 95
 Lys Lys Leu His Phe Lys Val Pro Lys Val Ser Phe Ser Ser Thr Lys
 100 105 110
 Thr Pro Lys Asp Ser Leu Val Pro Gly Ala Lys Ser Ser Ile Gly Leu
 115 120 125
 Ser Thr Ile Pro Leu Ser Ser Ser Glu Cys Ser Ser Phe Glu Leu Gln
 130 135 140
 Gln Val Ser Ala Cys Ser Glu Pro Ser Met Gln Met Pro Lys Val Gly

145 150 155 160
 Phe Ala Gly Phe Pro Ser Ser Arg Leu Asp Leu Thr Gly Pro His Phe
 165 170 175
 Glu Ser Ser Ile Leu Ser Pro Cys Glu Asp Val Thr Leu Thr Lys Tyr
 180 185 190
 Gln Val Thr Val Pro Arg Ala Ala Leu Ala Pro Glu Leu Ala Leu Glu
 195 200 205
 Ile Pro Ser Gly Ser Gln Ala Asp Ile Pro Leu Pro Lys Thr Glu Cys
 210 215 220
 Ser Thr Asp Leu Gln Pro Pro Glu Gly Val Pro Thr Ser Gln Ala Glu
 225 230 235 240
 Ser His Ser Gly Pro Leu Asn Ser Met Ile Pro Val Ser Leu Gly Gln
 245 250 255
 Val Ser Phe Pro Lys Phe Tyr Lys Pro Lys Phe Val Phe Ser Val Pro
 260 265 270
 Gln Met Ala Val Pro Glu Gly Asp Leu His Ala Ala Val Gly Ala Pro
 275 280 285
 Val Met Ser Pro Leu Ser Pro Gly Glu Arg Val Gln Cys Pro Leu Pro
 290 295 300
 Ser Thr Gln Leu Pro Ser Pro Gly Thr Cys Val Ser Gln Gly Pro Glu
 305 310 315 320
 Glu Leu Val Ala Ser Leu Gln Thr Ser Val Val Ala Pro Gly Glu Ala
 325 330 335
 Pro Ser Glu Asp Ala Asp His Glu Gly Lys Gly Ser Pro Leu Lys Met
 340 345 350
 Pro Lys Ile Lys Leu Pro Ser Phe Arg Trp Ser Pro Lys Lys Glu Thr
 355 360 365
 Gly Pro Lys Val Asp Pro Glu Cys Ser Val Glu Asp Ser Lys Leu Ser
 370 375 380
 Leu Val Leu Asp Lys Asp Glu Val Ala Pro Gln Ser Ala Ile His Met
 385 390 395 400
 Asp Leu Pro Pro Glu Arg Asp Gly Glu Lys Gly Arg Ser Thr Lys Pro
 405 410 415
 Gly Phe Ala Met Pro Lys Leu Ala Leu Pro Lys Met Lys Ala Ser Lys
 420 425 430
 Ser Gly Val Ser Leu Pro Gln Arg Gly Val Asp Pro Ser Leu Ser Ser

435	440	445
Ala Thr Ala Gly Gly Ser Phe	Gln Asp Thr Glu Lys Ala Ser Ser Asp	
450	455	460
Gly Gly Arg Gly Gly Leu Gly	Ala Thr Ala Ser Ala Thr Gly Ser Glu	
465	470	475
Gly Val Asn Leu His Arg Pro	Gln Val His Ile Pro Ser Leu Gly Phe	
485	490	495
Ala Lys Pro Asp Leu Arg Ser	Ser Lys Ala Lys Val Glu Val Ser Gln	
500	505	510
Pro Glu Ala Asp Leu Pro Leu	Pro Lys His Asp Leu Ser Thr Glu Gly	
515	520	525
Asp Ser Arg Gly Cys Gly Leu	Glu Asp Val Pro Val Ser Gln Pro Cys	
530	535	540
Gly Glu Gly Ile Ala Pro Thr	Pro Glu Asp Pro Leu Gln Pro Ser Cys	
545	550	555
Arg Lys Pro Asp Ala Glu Val	Leu Thr Val Glu Ser Pro Glu Glu Glu	
565	570	575
Ala Met Thr Lys Asp Ser Gln	Glu Ser Trp Phe Lys Met Pro Lys Phe	
580	585	590
Arg Met Pro Ser Leu Arg Arg	Ser Phe Arg Asp Arg Gly Gly Ala Gly	
595	600	605
Lys Leu Glu Val Ala Gln Thr	Gln Ala Pro Ala Ala Thr Gly Gly Glu	
610	615	620
Ala Ala Ala Lys Val Lys Glu	Phe Leu Val Ser Gly Ser Asn Val Glu	
625	630	635
Ala Ala Met Ser Leu Gln Leu	Pro Glu Ala Asp Ala Glu Val Thr Ala	
645	650	655
Ser Glu Ser Lys Ser Ser Thr	Asp Ile Leu Arg Cys Asp Leu Asp Ser	
660	665	670
Thr Gly Leu Lys Leu His Leu	Ser Thr Ala Gly Met Thr Gly Asp Glu	
675	680	685
Leu Ser Thr Ser Glu Val Arg	Ile His Pro Ser Lys Gly Pro Leu Pro	
690	695	700
Phe Gln Met Pro Gly Met Arg	Leu Pro Glu Thr Gln Val Leu Pro Gly	
705	710	715
Glu Ile Asp Glu Thr Pro Leu	Ser Lys Pro Gly His Asp Leu Ala Ser	

725	730	735
Met Glu Asp Lys Thr Glu Lys Trp Ser Ser Gln Pro Glu Gly Pro Leu		
740	745	750
Lys Leu Lys Ala Ser Ser Thr Asp Met Pro Ser Gln Ile Ser Val Val		
755	760	765
Asn Val Asp Gln Leu Trp Glu Asp Ser Val Leu Thr Val Lys Phe Pro		
770	775	780
Lys Leu Met Val Pro Arg Phe Ser Phe Ala Ala Pro Ser Ser Glu Asp		
785	790	795
Asp Val Phe Ile Pro Thr Val Arg Glu Val Gln Cys Pro Glu Ala Asn		
805	810	815
Ile Asp Thr Ala Leu Cys Lys Glu Ser Pro Gly Leu Trp Gly Ala Ser		
820	825	830
Ile Leu Lys Ala Gly Ala Gly Val Pro Gly Glu Gln Pro Val Asp Leu		
835	840	845
Asn Leu Pro Leu Glu Ala Pro Pro Ile Ser Lys Val Arg Val His Ile		
850	855	860
Gln Gly Ala Gln Val Glu Ser Gln Glu Val Thr Ile His Ser Ile Val		
865	870	875
Thr Pro Glu Phe Val Asp Leu Ser Val Pro Arg Thr Phe Ser Thr Gln		
885	890	895
Ile Val Arg Glu Ser Glu Ile Pro Thr Ser Glu Ile Gln Thr Pro Ser		
900	905	910
Tyr Gly Phe Ser Leu Leu Lys Val Lys Ile Pro Glu Pro His Thr Gln		
915	920	925
Ala Arg Val Tyr Thr Thr Met Thr Gln His Ser Arg Thr Gln Glu Gly		
930	935	940
Thr Glu Glu Ala Pro Ile Gln Ala Thr Pro Gly Val Asp Ser Ile Ser		
945	950	955
Gly Asp Leu Gln Pro Asp Thr Gly Glu Pro Phe Glu Met Ile Ser Ser		
965	970	975
Ser Val Asn Val Leu Gly Gln Gln Thr Leu Thr Phe Glu Val Pro Ser		
980	985	990
Gly His Gln Leu Ala Asp Ser Cys Ser Asp Glu Glu Pro Ala Glu Ile		
995	1000	1005
Leu Glu Phe Pro Pro Asp Asp Ser Gln Glu Ala Thr Thr Pro Leu Ala		

1010	1015	1020	
Asp Glu Gly Arg Ala Pro Lys Asp Lys Pro Glu Ser Lys Lys Ser Gly			
1025	1030	1035	1040
Leu Leu Trp Phe Trp Leu Pro Asn Ile Gly Phe Ser Ser Ser Val Asp			
1045	1050	1055	
Glu Thr Gly Val Asp Ser Lys Asn Asp Val Gln Arg Ser Ala Pro Ile			
1060	1065	1070	
Gln Thr Gln Pro Glu Ala Arg Pro Glu Ala Glu Leu Pro Lys Lys Gln			
1075	1080	1085	
Glu Lys Ala Gly Trp Phe Arg Phe Pro Lys Leu Gly Phe Ser Ser Ser			
1090	1095	1100	
Pro Thr Lys Lys Ser Lys Ser Thr Glu Asp Gly Ala Glu Leu Glu Glu			
1105	1110	1115	1120
Gln Lys Leu Gln Glu Glu Thr Ile Thr Phe Phe Asp Ala Arg Glu Ser			
1125	1130	1135	
Phe Ser Pro Glu Glu Lys Glu Glu Gly Glu Leu Ile Gly Pro Val Gly			
1140	1145	1150	
Thr Gly Leu Asp Ser Arg Val Met Val Thr Ser Ala Ala Arg Thr Glu			
1155	1160	1165	
Leu Ile Leu Pro Glu Gln Asp Arg Lys Ala Asp Asp Glu Ser Lys Gly			
1170	1175	1180	
Ser Gly Leu Gly Pro Asn Glu Gly			
1185	1190		

<210> 4326

<211> 503

<212> PRT

<213> Homo sapiens

<400> 4326

Met Ala Gly Leu Trp Leu Gly Leu Val Trp Gln Lys Leu Leu Leu Trp			
1	5	10	15
Gly Ala Ala Ser Ala Leu Ser Leu Ala Gly Ala Ser Leu Val Leu Ser			
20	25	30	
Leu Leu Gln Arg Val Ala Ser Tyr Ala Leu Leu Met Lys Pro Asp Gly			

35	40	45			
Arg Glu Phe Phe Gln Gln Ile Ile Glu Tyr Thr Glu Glu Tyr Arg His					
50	55	60			
Met Pro Leu Leu Lys Leu Trp Val Gly Pro Val Pro Met Val Ala Leu					
65	70	75	80		
Tyr Asn Ala Glu Asn Val Glu Val Ile Leu Thr Ser Ser Lys Gln Ile					
85	90	95			
Asp Lys Ser Ser Met Tyr Lys Phe Leu Glu Pro Trp Leu Gly Leu Gly					
100	105	110			
Leu Leu Thr Ser Thr Gly Asn Lys Trp Arg Ser Arg Arg Lys Met Leu					
115	120	125			
Thr Pro Thr Phe His Phe Thr Ile Leu Glu Asp Phe Leu Asp Ile Met					
130	135	140			
Asn Glu Gln Ala Asn Ile Leu Val Lys Lys Leu Glu Lys His Ile Asn					
145	150	155	160		
Gln Glu Ala Phe Asn Cys Phe Phe Tyr Ile Thr Leu Cys Ala Leu Asp					
165	170	175			
Ile Ile Cys Glu Thr Ala Met Gly Lys Asn Ile Gly Ala Gln Ser Asn					
180	185	190			
Asp Asp Ser Glu Tyr Val Arg Ala Val Tyr Arg Met Ser Glu Met Ile					
195	200	205			
Phe Arg Arg Ile Lys Met Pro Trp Leu Trp Leu Asp Leu Trp Tyr Leu					
210	215	220			
Met Phe Lys Glu Gly Trp Glu His Lys Lys Ser Leu Lys Ile Leu His					
225	230	235	240		
Thr Phe Thr Asn Ser Val Ile Ala Glu Arg Ala Asn Glu Met Asn Ala					
245	250	255			
Asn Glu Asp Cys Arg Gly Asp Gly Arg Gly Ser Ala Pro Ser Lys Asn					
260	265	270			
Lys Arg Arg Ala Phe Leu Asp Leu Leu Leu Ser Val Thr Asp Asp Glu					
275	280	285			
Gly Asn Arg Leu Ser His Glu Asp Ile Arg Glu Glu Val Asp Thr Phe					
290	295	300			
Met Phe Glu Gly His Asp Thr Thr Ala Ala Ala Ile Asn Trp Ser Leu					
305	310	315	320		
Tyr Leu Leu Gly Ser Asn Pro Glu Val Gln Lys Lys Val Asp His Glu					

325 330 335
 Leu Asp Asp Val Phe Gly Lys Ser Asp Arg Pro Ala Thr Val Glu Asp
 340 345 350
 Leu Lys Lys Leu Arg Tyr Leu Glu Cys Val Ile Lys Glu Thr Leu Arg
 355 360 365
 Leu Phe Pro Ser Val Pro Leu Phe Ala Arg Ser Val Ser Glu Asp Cys
 370 375 380
 Glu Val Ala Gly Tyr Arg Val Leu Lys Gly Thr Glu Ala Val Ile Ile
 385 390 395 400
 Pro Tyr Ala Leu His Arg Asp Pro Arg Tyr Phe Pro Asn Pro Glu Glu
 405 410 415
 Phe Gln Pro Glu Arg Phe Phe Pro Glu Asn Ala Gln Gly Arg His Pro
 420 425 430
 Tyr Ala Tyr Val Pro Phe Ser Ala Gly Pro Arg Asn Cys Ile Gly Gln
 435 440 445
 Lys Phe Ala Val Met Glu Glu Lys Thr Ile Leu Ser Cys Ile Leu Arg
 450 455 460
 His Phe Trp Ile Glu Ser Asn Gln Lys Arg Glu Glu Leu Gly Leu Glu
 465 470 475 480
 Gly Gln Leu Ile Leu Arg Pro Ser Asn Gly Ile Trp Ile Lys Leu Lys
 485 490 495
 Arg Arg Asn Ala Asp Glu Arg
 500

<210> 4327

<211> 491

<212> PRT

<213> Homo sapiens

<400> 4327

Met Ser Arg Val Ala Lys Tyr Arg Arg Gln Val Ser Glu Asp Pro Asp
 1 5 10 15
 Ile Asp Ser Leu Leu Glu Thr Leu Ser Pro Glu Glu Met Glu Glu Leu
 20 25 30
 Glu Lys Glu Leu Asp Val Val Asp Pro Asp Gly Ser Val Pro Val Gly

35	40	45
Leu Arg Gln Arg Asn Gln Thr Glu Lys Gln Ser Thr Gly Val Tyr Asn		
50	55	60
Arg Glu Ala Met Leu Asn Phe Cys Glu Lys Glu Thr Lys Lys Glu Glu		
65	70	75
Glu Lys Lys Gly Ser Asp Arg Asn Thr Gly Leu Ser Arg Asp Lys Asp		
85	90	95
Lys Lys Arg Glu Glu Met Lys Glu Val Ala Lys Lys Glu Asp Asp Glu		
100	105	110
Lys Val Lys Gly Glu Arg Arg Asn Thr Asp Thr Arg Lys Glu Gly Glu		
115	120	125
Lys Met Lys Arg Ala Gly Gly Asn Thr Asp Met Lys Lys Glu Asp Glu		
130	135	140
Lys Val Lys Arg Gly Thr Gly Asn Thr Asp Thr Lys Lys Asp Asp Glu		
145	150	155
Lys Val Lys Lys Asn Glu Pro Leu His Glu Lys Glu Ala Lys Asp Asp		
165	170	175
Ser Lys Thr Lys Thr Pro Glu Arg Gln Met Pro Ser Gly Pro Thr Lys		
180	185	190
Pro Ser Glu Gly Pro Ala Lys Val Glu Glu Glu Ala Ala Pro Ser Ile		
195	200	205
Phe Asp Glu Pro Leu Glu Arg Val Lys Asn Asn Asp Pro Glu Met Thr		
210	215	220
Glu Val Asn Val Asn Asn Ser Asp Cys Ile Thr Asn Glu Ile Leu Val		
225	230	235
Arg Phe Thr Glu Ala Leu Glu Phe Asn Thr Val Val Lys Leu Phe Ala		
245	250	255
Leu Ala Asn Thr Arg Ala Asp Asp His Val Ala Phe Ala Ile Ala Ile		
260	265	270
Met Leu Lys Ala Asn Lys Thr Ile Thr Ser Leu Asn Leu Asp Ser Asn		
275	280	285
His Ile Thr Gly Lys Gly Ile Leu Ala Ile Phe Arg Ala Leu Leu Gln		
290	295	300
Asn Asn Thr Leu Thr Glu Leu Arg Phe His Asn Gln Arg His Ile Cys		
305	310	315
		320

<213> Homo sapiens

Met Arg Leu Asn Ile Leu Pro Arg Arg Arg Arg Arg Gly Arg Pro Arg
1 5 10 15
Pro Gly Pro Gly Asp Arg Gly Ala Asp Pro Gly Thr Glu Pro Gly Phe
20 25 30
Val Arg Glu Ala Asp Ala Pro Arg Ala Pro Pro Pro Lys His Ser His
35 40 45

<211> 257

<212> PRT

<213> Homo sapiens

Met	Ala	Pro	Pro	Ala	Pro	Gly	Pro	Ala	Ser	Gly	Gly	Ser	Gly	Glu	Val
1				5					10					15	
Asp	Glu	Leu	Phe	Asp	Val	Lys	Asn	Ala	Phe	Tyr	Ile	Gly	Ser	Tyr	Gln
			20					25					30		
Gln	Cys	Ile	Asn	Glu	Ala	Gln	Arg	Val	Lys	Leu	Ser	Ser	Pro	Glu	Arg
		35					40					45			
Asp	Val	Glu	Arg	Asp	Val	Phe	Leu	Tyr	Arg	Ala	Tyr	Leu	Ala	Gln	Arg
	50					55					60				
Lys	Phe	Gly	Val	Val	Leu	Asp	Glu	Ile	Lys	Pro	Ser	Ser	Ala	Pro	Glu
65					70					75				80	
Leu	Gln	Ala	Val	Arg	Met	Phe	Ala	Asp	Tyr	Leu	Ala	His	Glu	Ser	Arg
			85						90				95		
Ser	Thr	Ala	Met	Thr	Val	Gln	Ile	Leu	Leu	Lys	Leu	Asp	Arg	Leu	Asp
		100						105					110		
Leu	Ala	Arg	Lys	Glu	Leu	Lys	Arg	Met	Gln	Asp	Leu	Asp	Glu	Asp	Ala
		115					120					125			
Thr	Leu	Thr	Gln	Leu	Ala	Thr	Ala	Trp	Val	Ser	Leu	Ala	Thr	Gly	Gly
130						135					140				

Glu Lys Leu Gln Asp Ala Tyr Tyr Ile Phe Gln Glu Met Ala Asp Lys
 145 150 155 160
 Cys Ser Pro Thr Leu Leu Leu Leu Asn Gly Gln Ala Ala Cys His Met
 165 170 175
 Ala Gln Gly Arg Trp Glu Ala Ala Glu Gly Leu Leu Gln Glu Ala Leu
 180 185 190
 Asp Lys Asp Ser Gly Tyr Pro Glu Thr Leu Val Asn Leu Ile Val Leu
 195 200 205
 Ser Gln His Leu Gly Lys Pro Pro Glu Val Thr Asn Arg Tyr Leu Ser
 210 215 220
 Gln Leu Lys Asp Ala His Arg Ser His Pro Phe Ile Lys Glu Tyr Gln
 225 230 235 240
 Ala Lys Glu Asn Asp Phe Asp Arg Leu Val Leu Gln Tyr Ala Pro Ser
 245 250 255
 Ala

<210> 4330

<211> 119

<212> PRT

<213> Homo sapiens

<400> 4330

Met Asn Asn Ala Ala Ile Ile Asn Ile His Thr Ser Phe Leu Trp Thr
 1 5 10 15
 Trp Phe His Phe Leu Gly Ile Cys Pro Ala Val Glu Phe Leu Gly His
 20 25 30
 Leu Leu Thr Met Ile Ser Leu Leu Glu Lys Leu Pro Asp Phe Leu Leu
 35 40 45
 Ile Phe Phe Phe Phe Leu Leu Leu Cys Ser Val Lys Lys Pro Phe Asn
 50 55 60
 Ala Tyr Glu Leu Lys Pro Cys Lys Glu Ser Asp His Leu Gly Leu Asp
 65 70 75 80
 Arg Lys Leu Leu Asp Phe Lys Cys Ile Thr Leu Arg Ile Phe Cys Asp
 85 90 95

Ser Leu Ala Ser Pro Leu Ser Ser Leu Phe Phe Leu Arg Ile His Glu
 100 105 110
 Leu Ala Pro Cys Leu His Ile
 115

<210> 4331

<211> 934

<212> PRT

<213> Homo sapiens

<400> 4331

Met Leu Thr Leu Glu Glu Phe Arg Glu Leu Arg Glu Gln Pro Ser Asp
 1 5 10 15
 Pro Gln Ala Glu Gln Glu Leu Ile Asn Ser Ile Glu Gln Val Tyr Phe
 20 25 30
 Ser Val Asp Ser Phe Asp Ile Val Lys Tyr Glu Leu Glu Lys Leu Pro
 35 40 45
 Pro Val Leu Asn Leu Gln Glu Leu Glu Ala Tyr Arg Asp Lys Leu Lys
 50 55 60
 Gln His Gln Ala Ala Val Ser Lys Lys Val Ala Asp Leu Ile Leu Glu
 65 70 75 80
 Lys Gln Pro Ala Tyr Val Lys Glu Leu Glu Arg Val Thr Ser Leu Gln
 85 90 95
 Thr Gly Leu Gln Leu Ala Ala Val Ile Cys Thr Asn Gly Arg Arg His
 100 105 110
 Leu Asn Ile Ala Lys Glu Gly Phe Thr Gln Ala Ser Leu Gly Leu Leu
 115 120 125
 Ala Asn Gln Arg Lys Arg Gln Leu Leu Ile Gly Leu Leu Lys Ser Leu
 130 135 140
 Arg Thr Ile Lys Thr Leu Gln Arg Thr Asp Val Arg Leu Ser Glu Met
 145 150 155 160
 Leu Glu Glu Glu Asp Tyr Pro Gly Ala Ile Gln Leu Cys Leu Glu Cys
 165 170 175
 Gln Lys Ala Ala Ser Thr Phe Lys His Tyr Ser Cys Ile Ser Glu Leu
 180 185 190

Asn Ser Lys Leu Gln Asp Thr Leu Glu Gln Ile Glu Glu Gln Leu Asp
 195 200 205
 Val Ala Leu Ser Lys Ile Cys Lys Asn Phe Asp Ile Asn His Tyr Thr
 210 215 220
 Lys Val Gln Gln Ala Tyr Arg Leu Leu Gly Lys Thr Gln Thr Ala Met
 225 230 235 240
 Asp Gln Leu His Met His Phe Thr Gln Ala Ile His Asn Thr Val Phe
 245 250 255
 Gln Val Val Leu Gly Tyr Val Glu Leu Cys Ala Gly Asn Thr Asp Thr
 260 265 270
 Lys Phe Gln Lys Leu Gln Tyr Lys Asp Leu Cys Thr His Val Thr Pro
 275 280 285
 Asp Ser Tyr Ile Pro Cys Leu Ala Asp Leu Cys Lys Ala Leu Trp Glu
 290 295 300
 Val Met Leu Ser Tyr Tyr Arg Thr Met Glu Trp His Glu Lys His Asp
 305 310 315 320
 Asn Glu Asp Thr Ala Ser Ala Ser Glu Gly Ser Asn Met Ile Gly Thr
 325 330 335
 Glu Glu Thr Asn Phe Asp Arg Gly Tyr Ile Lys Lys Lys Leu Glu His
 340 345 350
 Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr
 355 360 365
 Leu Leu Gly Thr Asp Leu Ser Ile Phe Lys Tyr Asp Asp Phe Ile Phe
 370 375 380
 Val Leu Asp Ile Ile Ser Arg Leu Met Gln Val Gly Glu Glu Phe Cys
 385 390 395 400
 Gly Ser Lys Ser Glu Val Leu Gln Glu Ser Ile Arg Lys Gln Ser Val
 405 410 415
 Asn Tyr Phe Lys Asn Tyr His Arg Thr Arg Leu Asp Glu Leu Arg Met
 420 425 430
 Phe Leu Glu Asn Glu Thr Trp Glu Leu Cys Pro Val Lys Ser Asn Phe
 435 440 445
 Ser Ile Leu Gln Leu His Glu Phe Lys Phe Met Glu Gln Ser Arg Ser
 450 455 460
 Pro Ser Val Ser Pro Ser Lys Gln Pro Val Ser Thr Ser Ser Lys Thr
 465 470 475 480

Val Thr Leu Phe Glu Gln Tyr Cys Ser Gly Gly Asn Pro Phe Glu Ile			
485	490	495	
Gln Ala Asn His Lys Asp Glu Glu Thr Glu Asp Val Leu Ala Ser Asn			
500	505	510	
Gly Tyr Glu Ser Asp Glu Gln Glu Lys Ser Ala Tyr Gln Glu Tyr Asp			
515	520	525	
Ser Asp Ser Asp Val Pro Glu Glu Leu Lys Arg Asp Tyr Val Asp Glu			
530	535	540	
Gln Thr Gly Asp Gly Pro Val Lys Ser Val Ser Arg Glu Thr Leu Lys			
545	550	555	560
Ser Arg Lys Lys Ser Asp Tyr Ser Leu Asn Lys Val Asn Ala Pro Ile			
565	570	575	
Leu Thr Asn Thr Thr Leu Asn Val Ile Arg Leu Val Gly Lys Tyr Met			
580	585	590	
Gln Met Met Asn Ile Leu Lys Pro Ile Ala Phe Asp Val Ile His Phe			
595	600	605	
Met Ser Gln Leu Phe Asp Tyr Tyr Leu Tyr Ala Ile Tyr Thr Phe Phe			
610	615	620	
Gly Arg Asn Asp Ser Leu Glu Ser Thr Gly Leu Gly Leu Ser Ser Ser			
625	630	635	640
Arg Leu Arg Thr Thr Leu Asn Arg Ile Gln Glu Ser Leu Ile Asp Leu			
645	650	655	
Glu Val Ser Ala Asp Pro Thr Ala Thr Leu Thr Ala Ala Glu Glu Arg			
660	665	670	
Lys Glu Lys Val Pro Ser Pro His Leu Ser His Leu Val Val Leu Thr			
675	680	685	
Ser Gly Asp Thr Leu Tyr Gly Leu Ala Glu Arg Val Val Ala Thr Glu			
690	695	700	
Ser Leu Val Phe Leu Ala Glu Gln Phe Glu Phe Leu Gln Pro His Leu			
705	710	715	720
Asp Ala Val Met Pro Ala Val Lys Lys Pro Phe Leu Gln Gln Phe Tyr			
725	730	735	
Ser Gln Thr Val Ser Thr Ala Ser Glu Leu Arg Lys Pro Ile Tyr Trp			
740	745	750	
Ile Val Ala Gly Lys Ala Leu Asp Tyr Glu Gln Met Leu Leu Leu Met			
755	760	765	

Ala Asn Val Lys Trp Asp Val Lys Glu Ile Met Ser Gln His Asn Ile
 770 775 780
 Tyr Val Asp Ala Leu Leu Lys Glu Phe Glu Gln Phe Asn Arg Arg Leu
 785 790 795 800
 Asn Glu Val Ser Lys Arg Val Arg Ile Pro Leu Pro Val Ser Asn Ile
 805 810 815
 Leu Trp Glu His Cys Ile Arg Leu Ala Asn Arg Thr Ile Val Glu Gly
 820 825 830
 Tyr Ala Asn Val Lys Lys Cys Ser Asn Glu Gly Arg Ala Leu Met Gln
 835 840 845
 Leu Asp Phe Gln Gln Phe Leu Met Lys Leu Glu Lys Leu Thr Asp Ile
 850 855 860
 Arg Pro Ile Pro Asp Lys Glu Phe Val Glu Thr Tyr Ile Lys Ala Tyr
 865 870 875 880
 Tyr Leu Thr Glu Asn Asp Met Glu Arg Trp Ile Lys Glu His Arg Glu
 885 890 895
 Tyr Ser Thr Lys Gln Leu Thr Asn Leu Val Asn Val Cys Leu Gly Ser
 900 905 910
 His Ile Asn Lys Lys Ala Arg Gln Lys Leu Leu Ala Ala Ile Asp Asp
 915 920 925
 Ile Asp Arg Pro Lys Arg
 930

<210> 4332

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4332

Met Glu Ala Val Arg Thr Leu Gly Ser Ser Val Pro Leu Leu Ser Val
 1 5 10 15
 Gly Pro Leu Arg Asn Pro Glu Phe Leu Val Gly Leu Leu Leu Ser
 20 25 30
 His Ile Pro Pro Tyr Pro Gly Met Cys Arg Phe Leu Leu Asp Leu Ser
 35 40 45

Thr Gly Pro Cys Val Gln Ser Gln Phe Ile Leu Val Asp Pro His Phe
 50 55 60
 His Pro Arg Ile His Phe His His Ser Gln Ser Leu Ser Ser Ile Met
 65 70 75 80
 Arg Arg Ser Gly Met Gln Ala Phe Cys Val Phe Ile Pro Ala Thr Ala
 85 90 95
 Leu Thr Leu Met Glu Arg Ala Gly Trp Gly Gly
 100 105

<210> 4333

<211> 103

<212> PRT

<213> Homo sapiens

<400> 4333

Met Arg Leu Ala Asn Phe Ser Tyr Phe Trp Ile Glu Thr Gly Phe His
 1 5 10 15
 Arg Val Ala Gln Ala Gly Leu Glu Leu Leu Gly Ser Ser Asp Pro Pro
 20 25 30
 Thr Leu Ala Ser Gln Arg Val Gly Ile Thr Gly Val Ser His Cys Ser
 35 40 45
 Gln Leu Leu Gly Arg Leu Gly His Glu Asn Cys Phe Asn Pro Glu Gly
 50 55 60
 Gly Val Cys Ser Glu Pro Arg Ser Cys His Cys Thr Pro Ala Trp Ala
 65 70 75 80
 Thr Glu Gly Asp Ser Val Ser Lys Lys Lys Lys Lys Val Lys Glu Gly
 85 90 95
 Phe Pro Glu Trp Pro Leu Asp
 100

<210> 4334

<211> 103

<212> PRT

<213> Homo sapiens

<400> 4334

Met Val Val Val Pro Ile Met Glu Asn Leu Leu Lys Ile Asn Cys Asn
 1 5 10 15
 Gly Leu Arg Thr Pro Pro Pro His Val Arg Ala Tyr Glu Gly Ile Phe
 20 25 30
 Phe Leu Arg Gln Lys Lys Glu His Cys Arg Arg Pro Ser Asp Phe Phe
 35 40 45
 Phe Pro Leu Phe Leu Phe Gln Arg Ala His Leu Leu Asp Asn Thr Glu
 50 55 60
 Arg Leu Glu Arg Ser Ser Arg Arg Leu Glu Ala Gly Tyr Gln Ile Ala
 65 70 75 80
 Val Glu Thr Gly Lys Asn Ser Glu Ser Glu Gln Ile Val Leu Leu Met
 85 90 95
 His Ser Ser Leu His Asn Thr
 100

<210> 4335

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4335

Met Glu Glu Gly Asn Thr Ser Thr Val Thr Gln Gln Val Arg Gly Arg
 1 5 10 15
 Thr Arg Thr Lys Pro Arg Ser Leu His Leu Ser Pro Gly Leu Leu Val
 20 25 30
 Thr Phe Leu Gln Glu Gly Leu Ser Lys Ser Ala Gly Ala Gln Arg Gln
 35 40 45
 Gly Pro Thr Tyr Pro Cys Arg Asp Thr Glu Arg Thr Lys Thr Lys Pro
 50 55 60
 Gln Gly Gly Gln Gln Pro Gln Thr Ser His Gly Leu Gly Leu Phe Ser
 65 70 75 80
 Ile Tyr Leu Gly Arg Phe Ile Lys Ser Thr Phe Phe Arg Glu Leu Arg

85 90 95
 Lys Glu Lys Lys Tyr Ala Pro Phe Leu Ser Leu Gly Asp Ser Tyr Ser
 100 105 110
 Arg Gly Thr
 115

<210> 4336

<211> 257

<212> PRT

<213> Homo sapiens

<400> 4336

Met Pro Leu Ala Cys Glu His Pro Val Gly Val Ser Ser Ser Val Gly
 1 5 10 15
 Asn Ala Gly Arg Ala Gly Val Gly Thr Gln Ala Trp Gly Thr Thr Glu
 20 25 30
 Arg Thr Gln His Pro Gly Pro Ala Gln His Cys Pro Cys Gly Leu Arg
 35 40 45
 Val Phe Val Leu Gln Glu Lys Arg Val Val Ser Arg Asn Trp Ala Arg
 50 55 60
 Gly Thr Cys Gly Pro Arg Val Thr Asn Glu Met Leu Glu Asp Glu Asp
 65 70 75 80
 Ala Glu Asp His Gly Gly Thr Phe Cys Leu Gly Glu Leu Val Glu Leu
 85 90 95
 Ala Val Thr Met Glu Asn Lys Ala Glu Gly Lys Arg Ile Val Ser Glu
 100 105 110
 Lys Pro Thr Arg Ala Arg Asn Gln Gly Ile Glu Gly Ser Pro Gly Gly
 115 120 125
 Arg Val Thr Arg Ser Pro Pro Thr Gln Val Ala Ile Ser Ser Asp Ser
 130 135 140
 Ala Arg Lys Gly Ser Trp Glu Pro Trp Ser Arg Pro Val Gly Glu Pro
 145 150 155 160
 Pro Glu Ala Gly Trp Asp Tyr Ala Gln Trp Lys Gln Glu Arg Glu Gln
 165 170 175
 Ile Asp Leu Ala Arg Leu Ala Arg His Arg Asp Ala Gln Gly Asp Trp

180 185 190
 Arg Arg Pro Trp Asp Leu Asp Lys Ala Lys Ser Thr Leu Gln Asp Cys
 195 200 205
 Ser Gln Leu Arg Gly Glu Gly Pro Ala Arg Ala Gly Ser Arg Arg Gly
 210 215 220
 Glu Pro Thr Pro Thr Ser Ser Leu Pro Ser Leu Ala Leu Phe Ile Phe
 225 230 235 240
 His Pro Leu Val Leu Ser Phe Leu Cys Leu Leu Val Ser Tyr Phe Gln
 245 250 255
 Ser

<210> 4337

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4337

Met Pro Ser Arg Gln Leu Glu Asp Pro Gly Ala Gly Thr Pro Ser Pro
 1 5 10 15
 Val Arg Leu His Ala Leu Ala Gly Phe Gln Gln Arg Ala Leu Cys His
 20 25 30
 Ala Leu Thr Phe Pro Ser Leu Gln Arg Leu Val Tyr Ser Met Cys Ser
 35 40 45
 Leu Cys Gln Glu Glu Asn Glu Asp Met Val Pro Asp Ala Leu Gln Gln
 50 55 60
 Asn Pro Gly Ala Phe Arg Leu Ala Pro Ala Leu Pro Ala Arg Pro His
 65 70 75 80
 Arg Gly Leu Ser Thr Phe Pro Gly Ala Glu His Cys Leu Arg Ala Ser
 85 90 95
 Pro Lys Thr Thr Leu Ser Gly Gly Phe Phe Val Ala Val Ile Glu Arg
 100 105 110
 Val Glu Met Pro Thr
 115

<210> 4338

<211> 232

<212> PRT

<213> Homo sapiens

<400> 4338

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Met Leu Met Glu Thr Ala Ala Arg Thr Ala Arg Ala Thr Ser Cys Pro
  1             5             10             15
Val Gln Gly Asp Gly Gln Glu Val Thr Cys Arg Gly Ala Leu Ala Leu
      20             25             30
Pro Ser Ala Gln Leu Asp Leu Leu Gly Leu Gly Leu Val Glu Pro Gly
      35             40             45
Thr Gln Cys Gly Pro Arg Met Val Cys Gln Ser Arg Arg Cys Arg Lys
      50             55             60
Asn Ala Phe Gln Glu Leu Gln Arg Cys Leu Thr Ala Cys His Ser His
      65             70             75             80
Gly Val Cys Asn Ser Asn His Asn Cys His Cys Ala Pro Gly Trp Ala
      85             90             95
Pro Pro Phe Cys Asp Lys Pro Gly Phe Gly Gly Ser Met Asp Ser Gly
      100            105            110
Pro Val Gln Ala Glu Asn His Asp Thr Phe Leu Leu Ala Met Leu Leu
      115            120            125
Ser Val Leu Leu Pro Leu Leu Pro Gly Ala Gly Leu Ala Trp Cys Cys
      130            135            140
Tyr Arg Leu Pro Gly Ala His Leu Gln Arg Cys Ser Trp Gly Cys Arg
      145            150            155            160
Arg Asp Pro Ala Cys Ser Gly Pro Lys Asp Gly Pro His Arg Asp His
      165            170            175
Pro Leu Gly Gly Val His Pro Thr Glu Leu Gly Pro Thr Ala Thr Gly
      180            185            190
Gln Ser Trp Pro Leu Asp Pro Glu Asn Ser His Glu Pro Ser Ser His
      195            200            205
Pro Glu Lys Pro Leu Pro Ala Val Ser Pro Asp Pro Gln Asp Gln Val
      210            215            220
Gln Met Pro Arg Ser Cys Leu Trp

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225

230

<210> 4339

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4339

Met Met Gly Ser Thr His Ile Tyr Asp Met Ser Thr Val Met Ser Arg

1 5 10 15

Lys Gly Pro Ala Pro Glu Leu Gln Gly Val Glu Val Ala Leu Ala Pro

20 25 30

Glu Glu Leu Glu Leu Asp Pro Met Ala Met Thr Gln Lys Tyr Glu Glu

35 40 45

His Val Arg Glu Gln Gln Ala Gln Val Glu Lys Glu Asp Phe Ser Asp

50 55 60

Met Val Ala Glu His Ala Ala Lys Gln Lys Val Gly Ala Ser Arg Gly

65 70 75 80

Ala Gly Leu Gly Glu Ser Gln Gly Pro Trp Pro Ala Val Phe Ser Gly

85 90 95

Met Val Pro Ser Ser Gly Glu Ser Glu Gly Gly Leu Cys Leu Leu Leu

100 105 110

Cys Ala Ser Leu Asp Leu Glu Val Leu Glu Ile Leu Gln Trp Ala Ala

115 120 125

Leu Phe Lys Asp Asp Glu Gly Glu Glu Leu Ser Gln Val

130 135 140

<210> 4340

<211> 352

<212> PRT

<213> Homo sapiens

<400> 4340

Met Ser Gln Ile Arg Lys Leu Asp Glu Asp Ala Ser Pro Asn Glu Glu
 1 5 10 15
 Lys Gly Asp Val Pro Lys Asp Thr Leu Asp Asp Leu Phe Pro Asn Glu
 20 25 30
 Asp Glu Gln Ser Pro Ala Pro Ser Pro Gly Gly Gly Asp Val Ser Gly
 35 40 45
 Gln His Gly Gly Tyr Glu Ile Pro Ala Arg Leu Arg Ile Leu His Asn
 50 55 60
 Leu Val Ile Gln Tyr Ala Ser Gln Gly Arg Tyr Glu Val Ala Val Pro
 65 70 75 80
 Leu Cys Lys Gln Ala Leu Glu Asp Leu Glu Lys Thr Ser Gly His Asp
 85 90 95
 His Pro Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu Val Tyr Arg
 100 105 110
 Asp Gln Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn Asp Ala Leu
 115 120 125
 Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp His Pro Ala Val Ala Ala
 130 135 140
 Thr Leu Asn Asn Leu Ala Val Leu Tyr Gly Lys Arg Gly Lys Tyr Lys
 145 150 155 160
 Glu Ala Glu Pro Leu Cys Lys Arg Ala Leu Glu Ile Arg Glu Lys Val
 165 170 175
 Leu Gly Lys Phe His Pro Asp Val Ala Lys Gln Leu Ser Asn Leu Ala
 180 185 190
 Leu Leu Cys Gln Asn Gln Gly Lys Ala Glu Glu Val Glu Tyr Tyr Tyr
 195 200 205
 Arg Arg Ala Leu Glu Ile Tyr Ala Thr Arg Leu Gly Pro Asp Asp Pro
 210 215 220
 Asn Val Ala Lys Thr Lys Asn Asn Leu Ala Ser Cys Tyr Leu Lys Gln
 225 230 235 240
 Gly Lys Tyr Gln Asp Ala Glu Thr Leu Tyr Lys Glu Ile Leu Thr Arg
 245 250 255
 Ala His Glu Lys Glu Phe Gly Ser Val Asn Gly Asp Asn Lys Pro Ile
 260 265 270
 Trp Met His Ala Glu Glu Arg Glu Glu Ser Lys Asp Lys Arg Arg Asp
 275 280 285

Ser Ala Pro Tyr Gly Glu Tyr Gly Ser Trp Tyr Lys Ala Cys Lys Val
 290 295 300
 Asp Ser Pro Ile Val Asn Thr Thr Leu Arg Ser Leu Gly Ala Leu Tyr
 305 310 315 320
 Arg Arg Gln Gly Lys Leu Glu Ala Ala His Thr Leu Glu Asp Cys Ala
 325 330 335
 Ser Arg Thr Ala Ser Arg Val Trp Thr Pro Gln Ala Arg Pro Arg Trp
 340 345 350

<210> 4341

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4341

Met Val Arg Trp Val Pro Thr Arg Arg Val Val Val Ile Cys Asp Gly
 1 5 10 15
 Thr Cys Ser His Thr Leu Leu Cys Thr Pro Pro Gly Ser Pro Lys Ser
 20 25 30
 Leu His Ala Gly Ser Pro His Pro Ser Cys Ser Arg Lys His Val Arg
 35 40 45
 Lys Gln Ser Arg Arg Leu Leu Arg Gly Arg His Glu Ser Thr Leu Val
 50 55 60
 Leu Lys Pro Phe Pro Asn Val Leu Val Asp Cys Val Val Leu Pro Lys
 65 70 75 80
 Leu Pro Ala Ala Gly Ala Arg Glu Val Thr Pro Ala Gly Ala Ala Ala
 85 90 95
 Gly Gly Ser Pro Arg Trp Leu Ala Leu Phe Leu Phe Cys Phe Phe Phe
 100 105 110

<210> 4342

<211> 1253

<212> PRT

<213> Homo sapiens

<400> 4342

Met Gln Ala Asp Lys Cys Arg Thr Ser Ser Arg Ser Val Lys Lys Glu
 1 5 10 15
 Leu Val Ile Glu Ser Pro Leu Gln Tyr Lys Asp Ala Ala Gln Gly Glu
 20 25 30
 Val Glu Ala Glu Ser Pro Gly Pro Val Pro Ala Lys Pro Lys Leu Ile
 35 40 45
 Glu Pro Leu Asp Tyr Glu Asn Val Ile Val Gln Lys Lys Thr Gln Ile
 50 55 60
 Leu Asn Asp Cys Leu Arg Glu Met Leu Leu Phe Pro Tyr Asp Asp Phe
 65 70 75 80
 Gln Thr Ala Ile Leu Arg Arg Gln Gly Arg Tyr Ile Cys Ser Thr Val
 85 90 95
 Pro Ala Lys Ala Glu Glu Glu Ala Gln Ser Leu Phe Val Thr Glu Cys
 100 105 110
 Ile Lys Thr Tyr Asn Ser Asp Trp His Leu Val Asn Tyr Lys Tyr Glu
 115 120 125
 Asp Tyr Ser Gly Glu Phe Arg Gln Leu Pro Asn Lys Val Val Lys Leu
 130 135 140
 Asp Lys Leu Pro Val His Val Tyr Glu Val Asp Glu Glu Val Asp Lys
 145 150 155 160
 Asp Glu Asp Ala Ala Ser Leu Gly Pro Gln Lys Gly Gly Ile Thr Lys
 165 170 175
 His Gly Trp Leu Tyr Lys Gly Asn Met Asn Ser Ala Ile Ser Val Thr
 180 185 190
 Met Arg Ser Phe Lys Arg Arg Phe Phe His Leu Ile Gln Leu Gly Asp
 195 200 205
 Gly Ser Tyr Asn Leu Asn Phe Tyr Lys Asp Glu Lys Ile Ser Lys Glu
 210 215 220
 Pro Lys Gly Ser Ile Phe Leu Asp Ser Cys Met Gly Val Val Gln Asn
 225 230 235 240
 Asn Lys Val Arg Arg Phe Ala Phe Glu Leu Lys Met Gln Asp Lys Ser
 245 250 255
 Ser Tyr Leu Leu Ala Ala Asp Ser Glu Val Glu Met Glu Glu Trp Ile
 260 265 270

Thr Ile Leu Asn Lys Ile Leu Gln Leu Asn Phe Glu Ala Ala Met Gln
 275 280 285
 Glu Lys Arg Asn Gly Asp Pro His Glu Asp Asp Glu Gln Ser Lys Leu
 290 295 300
 Glu Gly Ser Gly Ser Gly Leu Asp Ser Tyr Leu Pro Glu Leu Ala Lys
 305 310 315 320
 Ser Ala Arg Glu Ala Glu Ile Lys Leu Lys Ser Glu Ser Arg Val Lys
 325 330 335
 Leu Phe Tyr Leu Asp Pro Asp Ala Gln Lys Leu Asp Phe Ser Ser Ala
 340 345 350
 Glu Pro Glu Val Lys Ser Phe Glu Glu Lys Phe Gly Lys Arg Ile Leu
 355 360 365
 Val Lys Cys Asn Asp Leu Ser Phe Asn Leu Gln Cys Cys Val Ala Glu
 370 375 380
 Asn Glu Glu Gly Pro Thr Thr Asn Val Glu Pro Phe Phe Val Thr Leu
 385 390 395 400
 Ser Leu Phe Asp Ile Lys Tyr Asn Arg Lys Ile Ser Ala Asp Phe His
 405 410 415
 Val Asp Leu Asn His Phe Ser Val Arg Gln Met Leu Ala Thr Thr Ser
 420 425 430
 Pro Ala Leu Met Asn Gly Ser Gly Gln Ser Pro Ser Val Leu Lys Gly
 435 440 445
 Ile Leu His Glu Ala Ala Met Gln Tyr Pro Lys Gln Gly Ile Phe Ser
 450 455 460
 Val Thr Cys Pro His Pro Asp Ile Phe Leu Val Ala Arg Ile Glu Lys
 465 470 475 480
 Val Leu Gln Gly Ser Ile Thr His Cys Ala Glu Pro Tyr Met Lys Ser
 485 490 495

 Ser Asp Ser Ser Lys Val Ala Gln Lys Val Leu Lys Asn Ala Lys Gln
 500 505 510
 Ala Cys Gln Arg Leu Gly Gln Tyr Arg Met Pro Phe Ala Trp Ala Ala
 515 520 525
 Arg Thr Leu Phe Lys Asp Ala Ser Gly Asn Leu Asp Lys Asn Ala Arg
 530 535 540
 Phe Ser Ala Ile Tyr Arg Gln Asp Ser Asn Lys Leu Ser Asn Asp Asp

545 550 555 560
 Met Leu Lys Leu Leu Ala Asp Phe Arg Lys Pro Glu Lys Met Ala Lys
 565 570 575
 Leu Pro Val Ile Leu Gly Asn Leu Asp Ile Thr Ile Asp Asn Val Ser
 580 585 590
 Ser Asp Phe Pro Asn Tyr Val Asn Ser Ser Tyr Ile Pro Thr Lys Gln
 595 600 605
 Phe Glu Thr Cys Ser Lys Thr Pro Ile Thr Phe Glu Val Glu Glu Phe
 610 615 620
 Val Pro Cys Ile Pro Lys His Thr Gln Pro Tyr Thr Ile Tyr Thr Asn
 625 630 635 640
 His Leu Tyr Val Tyr Pro Lys Tyr Leu Lys Tyr Asp Ser Gln Lys Ser
 645 650 655
 Phe Ala Lys Ala Arg Asn Ile Ala Ile Cys Ile Glu Phe Lys Asp Ser
 660 665 670
 Asp Glu Glu Asp Ser Gln Pro Leu Lys Cys Ile Tyr Gly Arg Pro Gly
 675 680 685
 Gly Pro Val Phe Thr Arg Ser Ala Phe Ala Ala Val Leu His His His
 690 695 700
 Gln Asn Pro Glu Phe Tyr Asp Glu Ile Lys Ile Glu Leu Pro Thr Gln
 705 710 715 720
 Leu His Glu Lys His His Leu Leu Leu Thr Phe Phe His Val Ser Cys
 725 730 735
 Asp Asn Ser Ser Lys Gly Ser Thr Lys Lys Arg Asp Val Val Glu Thr
 740 745 750
 Gln Val Gly Tyr Ser Trp Leu Pro Leu Leu Lys Asp Gly Arg Val Val
 755 760 765
 Thr Ser Glu Gln His Ile Pro Val Ser Ala Asn Leu Pro Ser Gly Tyr
 770 775 780
 Leu Gly Tyr Gln Glu Leu Gly Met Gly Arg His Tyr Gly Pro Glu Ile
 785 790 795 800
 Lys Trp Val Asp Gly Gly Lys Pro Leu Leu Lys Ile Ser Thr His Leu
 805 810 815
 Val Ser Thr Val Tyr Thr Gln Asp Gln His Leu His Asn Phe Phe Gln
 820 825 830
 Tyr Cys Gln Lys Thr Glu Ser Gly Ala Gln Ala Leu Gly Asn Glu Leu

835	840	845	
Val Lys Tyr Leu Lys Ser Leu His Ala Met Glu Gly His Val Met Ile			
850	855	860	
Ala Phe Leu Pro Thr Ile Leu Asn Gln Leu Phe Arg Val Leu Thr Arg			
865	870	875	880
Ala Thr Gln Glu Glu Val Ala Val Asn Val Thr Arg Val Ile Ile His			
885	890	895	
Val Val Ala Gln Cys His Glu Glu Gly Leu Glu Ser His Leu Arg Ser			
900	905	910	
Tyr Val Lys Tyr Ala Tyr Lys Ala Glu Pro Tyr Val Ala Ser Glu Tyr			
915	920	925	
Lys Thr Val His Glu Glu Leu Thr Lys Ser Met Thr Thr Ile Leu Lys			
930	935	940	
Pro Ser Ala Asp Phe Leu Thr Ser Asn Lys Leu Leu Lys Tyr Ser Trp			
945	950	955	960
Phe Phe Phe Asp Val Leu Ile Lys Ser Met Ala Gln His Leu Ile Glu			
965	970	975	
Asn Ser Lys Val Lys Leu Leu Arg Asn Gln Arg Phe Pro Ala Ser Tyr			
980	985	990	
His His Ala Val Glu Thr Val Val Asn Met Leu Met Pro His Ile Thr			
995	1000	1005	
Gln Lys Phe Arg Asp Asn Pro Glu Ala Ser Lys Asn Ala Asn His Ser			
1010	1015	1020	
Leu Ala Val Phe Ile Lys Arg Cys Phe Thr Phe Met Asp Arg Gly Phe			
1025	1030	1035	1040
Val Phe Lys Gln Ile Asn Asn Tyr Ile Ser Cys Phe Ala Pro Gly Asp			
1045	1050	1055	
Pro Lys Thr Leu Phe Glu Tyr Lys Phe Glu Phe Leu Arg Val Val Cys			
1060	1065	1070	
Asn His Glu His Tyr Ile Pro Leu Asn Leu Pro Met Pro Phe Gly Lys			
1075	1080	1085	
Gly Arg Ile Gln Arg Tyr Gln Asp Leu Gln Leu Asp Tyr Ser Leu Thr			
1090	1095	1100	
Asp Glu Phe Cys Arg Asn His Phe Leu Val Gly Leu Leu Leu Arg Glu			
1105	1110	1115	1120
Val Gly Thr Ala Leu Gln Glu Phe Arg Glu Val Arg Leu Ile Ala Ile			

1125 1130 1135
 Ser Val Leu Lys Asn Leu Leu Ile Lys His Ser Phe Asp Asp Arg Tyr
 1140 1145 1150
 Ala Ser Arg Ser His Gln Ala Arg Ile Ala Thr Leu Tyr Leu Pro Leu
 1155 1160 1165
 Phe Gly Leu Leu Ile Glu Asn Val Gln Arg Ile Asn Val Arg Asp Val
 1170 1175 1180
 Ser Pro Phe Pro Val Asn Ala Gly Met Thr Val Lys Asp Glu Ser Leu
 1185 1190 1195 1200
 Ala Leu Pro Ala Val Asn Pro Leu Val Thr Pro Gln Lys Gly Ser Thr
 1205 1210 1215
 Leu Asp Asn Ser Leu His Lys Asp Leu Leu Gly Ala Ile Ser Gly Ile
 1220 1225 1230
 Gly Asn Ala Pro Cys Ser Cys Gly Leu Leu Ser Thr Ile Thr Leu Lys
 1235 1240 1245
 Val Ser Trp Ser Gln
 1250

<210> 4343

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4343

Met Cys His His Ala Trp Leu Ser Phe Val Phe Leu Val Glu Thr Gly
 1 5 10 15
 Phe His His Ile Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp
 20 25 30
 Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His
 35 40 45
 His Thr Arg Leu Ser Asn Thr Ile Leu Ser Arg Ser Gly Glu Arg Gly
 50 55 60
 His Pro Cys Leu Val Pro Val Phe Lys Gly Asn Ala Ser Ser Phe Cys
 65 70 75 80
 Pro Phe Ser Ile Ile Leu Ala Val Phe Val Ile Asn Ser Ser Tyr Tyr

85 90 95
Phe Glu Ile His Ser Ile Ser Thr
100

<210> 4344

<211> 772

<212> PRT

<213> Homo sapiens

<400> 4344

Met Asp Thr Glu Phe Gly Ala Ser Ser Phe Phe His Ser Pro Ala Ser
1 5 10 15
Cys His Glu Ser His Ser Ser Leu Ser Pro Glu Ser Ser Ala Pro Gln
20 25 30
His Ser Ser Pro Ser Arg Ser Ala Leu Lys Leu Leu Thr Ser Val Glu
35 40 45
Val Asp Asn Ile Glu Pro Ser Ala Phe His Arg Gln Gly Leu Pro Lys
50 55 60
Ala Pro Gly Trp Thr Glu Lys Asn Ser His His Ser Trp Glu Pro Leu
65 70 75 80
Asp Ala Pro Glu Gly Lys Leu Gln Gly Ser Arg Cys Asp Asn Ser Ser
85 90 95
Cys Ser Lys Leu Pro Pro Gln Glu Gly Arg Gly Ile Ala Gln Glu Gln
100 105 110
Leu Phe Gln Glu Lys Lys Asp Pro Ala Asn Pro Ser Pro Val Met Pro
115 120 125
Gly Ile Ala Thr Ser Glu Arg Gly Asp Glu His Ser Leu Gly Cys Ser
130 135 140
Pro Ser Asn Ser Ser Ala Gln Pro Ser Leu Pro Leu Tyr Arg Thr Cys
145 150 155 160
His Pro Ile Met Pro Val Ala Ser Ser Phe Val Leu His Cys Pro Asp
165 170 175
Pro Val Gln Lys Thr Asn Gln Cys Leu Gln Gly Gln Ser Leu Lys Thr
180 185 190
Ser Leu Thr Leu Lys Val Asp Arg Gly Ser Glu Glu Thr Tyr Arg Pro

195	200	205
Glu Phe Pro Ser Thr Lys Gly Leu Val Arg Ser Leu Ala Glu Gln Phe		
210	215	220
Gln Arg Met Gln Gly Val Ser Met Arg Asp Ser Thr Gly Phe Lys Asp		
225	230	235
Arg Ser Leu Ser Gly Ser Leu Arg Lys Asn Ser Ser Pro Ser Asp Ser		
245	250	255
Lys Pro Pro Phe Ser Gln Gly Gln Glu Lys Gly His Trp Pro Trp Ala		
260	265	270
Lys Gln Gln Ser Ser Leu Glu Gly Gly Asp Arg Pro Leu Ser Trp Glu		
275	280	285
Glu Ser Thr Glu His Ser Ser Leu Ala Leu Asn Ser Gly Leu Pro Asn		
290	295	300
Gly Glu Thr Ser Ser Gly Gly Gln Pro Arg Leu Ala Glu Pro Asp Ile		
305	310	315
Tyr Gln Glu Lys Leu Ser Gln Val Arg Asp Val Arg Ser Lys Asp Leu		
325	330	335
Gly Ser Ser Thr Asp Leu Gly Thr Ser Leu Pro Leu Asp Ser Trp Val		
340	345	350
Asn Ile Thr Arg Phe Cys Asp Ser Gln Leu Lys His Gly Ala Pro Arg		
355	360	365
Pro Gly Met Lys Ser Ser Pro His Asp Ser His Thr Cys Val Thr Tyr		
370	375	380
Pro Glu Arg Asn His Ile Leu Leu His Pro His Trp Asn Gln Asp Thr		
385	390	395
Glu Gln Glu Thr Ser Glu Leu Glu Ser Leu Tyr Gln Ala Ser Leu Gln		
405	410	415
Ala Ser Gln Ala Gly Cys Ser Gly Trp Gly Gln Gln Asp Thr Ala Trp		
420	425	430
His Pro Leu Ser Gln Thr Gly Ser Ala Asp Gly Met Gly Arg Arg Leu		
435	440	445
His Ser Ala His Asp Pro Gly Leu Ser Lys Thr Ser Thr Ala Glu Met		
450	455	460
Glu His Gly Leu His Glu Ala Arg Thr Val Arg Thr Ser Gln Ala Thr		
465	470	475
Pro Cys Arg Gly Leu Ser Arg Glu Cys Gly Glu Asp Glu Gln Tyr Ser		

770

<210> 4345

<211> 235

<212> PRT

<213> Homo sapiens

<400> 4345

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Met Asp Leu Ser Leu His Val Ala Ser Leu Cys Leu Pro His His Pro
  1              5              10              15
Ser Pro Ala Gln Leu Lys Pro Ala Gly Ala Leu Cys Arg Gln Ala Met
      20              25              30
Gly Asp Cys Asp Leu Pro Glu Phe Cys Thr Gly Thr Ser Ser His Cys
      35              40              45
Pro Pro Asp Val Tyr Leu Leu Asp Gly Ser Pro Cys Ala Arg Gly Ser
      50              55              60
Gly Tyr Cys Trp Asp Gly Ala Cys Pro Thr Leu Glu Gln Gln Cys Gln
      65              70              75              80
Gln Leu Trp Gly Pro Gly Glu Arg Thr Arg Ala Pro Leu His Pro Ala
      85              90              95
Pro His Pro Leu Val Gly Pro Val Phe Tyr Cys Gly Glu Asp Gly Gln
      100             105             110
Gly Lys Leu Arg Pro Ala Glu Arg Ser Pro Ser Pro Ser Cys Pro Gln
      115             120             125
Pro Gly Pro Cys Phe Leu Arg Leu Pro Pro Ser Ser Arg Gly Leu Phe
      130             135             140
Pro Gly Gly Glu Leu Cys Gly Arg Cys Ser Trp Lys Leu Arg Pro Gly
      145             150             155             160
Gln Arg Gly Pro Leu Pro Ala Leu Cys Arg Glu Gly Cys Pro Val Trp
      165             170             175
Glu Ala Ala Val Pro Gly Trp Lys Ala Gln Pro Ala Arg Thr Ala His
      180             185             190
Gly Ala Ser Gly Leu Tyr Arg Ser Pro Arg Trp Pro Gly Ser Asp Leu
      195             200             205
Ser Gly Ser Leu Gly Thr Pro Gln Cys Pro Ala Gly Pro Ala Trp Pro

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210 215 220
 Gly Pro Gly Arg Ala Arg His Pro Val Trp Thr
 225 230 235

<210> 4346

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4346

Met Gly Lys Arg Glu Gln Val Gly Arg Arg Ser Gly Ala Trp Ala Glu
 1 5 10 15
 Ala Ala Met Leu Cys Phe Leu Leu Gln Val Glu Ala Ser Gly Val Tyr
 20 25 30
 Ala Ala Ser Lys Glu Gly Gly His Gly Arg Gly Val Leu Ser His Ala
 35 40 45
 Ala Arg Ala Gly Arg Pro Trp Glu Ala Ala His Phe Phe Leu Gly Pro
 50 55 60
 Asp Ala Trp Ser Val Thr Thr Gly Arg Ala Gly Leu Thr Glu Ala Pro
 65 70 75 80
 Ala Pro Ala Ala Pro Tyr Leu Pro Gly Met Ala Arg Glu Ser Arg Pro
 85 90 95
 Glu Gly Gly Ser Ser Arg Leu Leu Glu Gln Glu Arg Ala Gly Ser Gly
 100 105 110
 Asp Arg Cys Val Pro Ala Ala Gln Arg Ser Gly Gln Gly
 115 120 125

<210> 4347

<211> 170

<212> PRT

<213> Homo sapiens

<400> 4347

Met Ala Thr Ala Thr Asn Glu Leu Gly Gln Ala Thr Cys Ala Ala Ser

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      1             5             10             15
Leu Thr Val Arg Pro Gly Gly Ser Thr Ser Pro Phe Ser Ser Pro Ile
      20             25             30
Thr Ser Asp Glu Glu Tyr Leu Ser Pro Pro Glu Glu Phe Pro Glu Pro
      35             40             45
Gly Glu Thr Trp Pro Arg Thr Pro Thr Met Lys Pro Ser Pro Ser Gln
      50             55             60
Asn Arg Arg Ser Ser Asp Thr Gly Ser Lys Ala Pro Pro Thr Phe Lys
      65             70             75             80
Val Ser Leu Met Asp Gln Ser Val Arg Glu Gly Gln Asp Val Ile Met
      85             90             95
Ser Ile Arg Val Gln Gly Glu Pro Lys Pro Val Val Ser Trp Leu Arg
      100            105            110
Asn Arg Gln Pro Val Arg Pro Asp Gln Arg Arg Phe Ala Glu Glu Ala
      115            120            125
Glu Gly Gly Leu Cys Arg Leu Arg Ile Leu Ala Ala Glu Arg Gly Asp
      130            135            140
Ala Gly Phe Tyr Thr Cys Lys Ala Val Asn Glu Tyr Gly Ala Arg Gln
      145            150            155            160
Cys Glu Ala Arg Leu Glu Val Arg Gly Glu
      165            170

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<210> 4348

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4348

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Met Ile Leu Ala His Cys Ser Leu Asp Phe Leu Gly Ser Ser Asp Pro
      1             5             10             15
Pro Gln Pro Pro Met Trp Leu Glu Pro Gln Ala Arg Ala Thr Met Pro
      20             25             30
Gly Tyr Phe Phe Val Glu Leu Gly Ser Arg Phe Val Ala Gln Ala Gly
      35             40             45
Leu Glu Leu Leu Gly Ser Ser Asn Pro Ser His Ser Ala Ser Arg Ser

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50	55	60
Val Glu Asn Ile Gly	Val Gly Tyr Tyr Thr Cys Phe Ser Arg Phe Tyr	
65	70	75
Lys Thr Ala Asp Leu Cys Val Glu Asp Arg Pro Gly Val Cys Ser Leu		
85	90	95
Arg Cys Glu Asp Val Leu Ser Arg Asp Phe Pro Trp Val Ser Ile Ser		
100	105	110
Phe Phe Leu Leu Ser Ser Lys Thr Asn Arg Arg Pro Ala Ala Val Ala		
115	120	125
Gln Ala Ser Ser Pro Ser Thr Leu Gly Gly Cys Arg Trp Arg Ile Thr		
130	135	140
Arg Pro Gly Val Arg Asp Gln Pro Gly Arg His Asp Glu Ala Leu Ser		
145	150	155
Leu Pro Lys Met Gln Lys Leu Ala Gly Cys Asp Gly Gly Cys Leu Trp		
165	170	175
Ser Gln Leu Leu Gly Arg Leu Arg Gln Glu Asn Cys Leu Asp Pro Gly		
180	185	190
Gly Gly Gly Cys Ser Glu Pro Gly Ser Cys His Cys Thr Pro Ala Trp		
195	200	205
Ala Thr Gly Arg Asp Ser Val Ser Lys Thr Asn Thr Ile Arg Lys Cys		
210	215	220
Ser Gly Gly Gly Gly Glu Leu Leu Ile Cys Glu Asp Arg Leu Lys Ala		
225	230	235
Thr Pro Arg Val Ala Leu Ser Thr Ser Pro Ser Arg Ile Trp Leu Pro		
245	250	255
Ala Ser Leu Lys Ile Val Val Trp His Lys Glu Arg Cys Arg Arg Leu		
260	265	270
Val Leu Ser Thr Leu Glu Phe Pro Ala Ala Gln His Leu Val Pro Ser		
275	280	285
Pro Pro Pro Ser Gln Gly Ala Ala Ile Leu Phe Gly Phe Ser Val Cys		
290	295	300
Gly Pro Glu Thr Asn Val Phe Pro Lys Asp		
305	310	

<211> 413

<212> PRT

<213> Homo sapiens

<400> 4349

Met Ser Leu Thr Thr Asp Asp Leu Leu Arg Leu Pro Ala Asp Gly Ser
 1 5 10 15
 Phe Ser Tyr Thr Tyr Val Gly Pro Ser His Arg Thr Ser Lys Lys Asn
 20 25 30
 Lys Lys Cys Arg Gly Arg Leu Gly Ser Leu Asp Ile Glu Lys Asn Pro
 35 40 45
 His Phe Gln Gly Pro Tyr Thr Ser Met Gly Lys Asp Asn Phe Val Thr
 50 55 60
 Pro Val Ile Arg Ser Asn Ile Asn Gly Lys Gln Cys Gly Arg Leu Lys
 65 70 75 80
 Asn Pro Lys Leu Met Asn Arg Thr Asn Asn Cys Ile Ser Glu Ser Ser
 85 90 95
 Leu Ser Phe Pro Lys Lys Ser Ser Phe Lys Asp Ser Ser Glu His Ser
 100 105 110
 Leu Glu Lys Asn Tyr Pro Arg Trp Leu Thr Ser Gln Lys Ser Asp Leu
 115 120 125
 Asn Val Ser Gly Ile Thr Ser Ile Pro Asp Phe Lys Tyr Pro Val Trp
 130 135 140
 Leu His Asn Gln Asp Leu Leu Pro Asp Ala Asn Ser Gln Arg Val Tyr
 145 150 155 160
 Gln Ile Phe Lys Asp Asp Gln Cys Ser Pro Arg His Ser His Gln Ala
 165 170 175
 Gln Gly Thr Ser Arg Leu Ile Asn Lys Leu Asp Cys Phe Glu Tyr Ala
 180 185 190
 Phe Glu Pro Ser Asn Phe Ser Asn Ser Leu Ser Asp Asp Lys Glu Leu
 195 200 205
 Val Asn Glu Tyr Lys Cys Asp Phe Glu His Ser Gln Cys Gln Cys Glu
 210 215 220
 Asn Pro Leu Leu Pro Gly Gln Ser Thr Lys Pro Phe Ser Gly Asp Lys
 225 230 235 240
 Ile Glu Leu Leu Ile Leu Lys Ala Lys Arg Asn Leu Glu Gln Cys Thr

245 250 255
 Glu Glu Leu Pro Lys Ser Met Lys Lys Asp Asp Ser Pro Cys Ser Leu
 260 265 270
 Asp Lys Leu Glu Ala Asp Arg Ser Trp Glu Asn Ile Pro Val Thr Phe
 275 280 285
 Lys Ser Pro Val Pro Val Asn Ser Asp Asp Ser Pro Gln Gln Thr Ser
 290 295 300
 Arg Ala Lys Ser Ala Lys Gly Val Leu Glu Asp Phe Leu Asn Asn Asp
 305 310 315 320
 Asn Gln Ser Cys Thr Leu Ser Gly Gly Lys His His Gly Pro Val Glu
 325 330 335
 Ala Leu Lys Gln Met Leu Phe Asn Leu Gln Ala Val Gln Glu Arg Phe
 340 345 350
 Asn Gln Asn Lys Thr Thr Asp Pro Lys Glu Glu Ile Lys Gln Val Ser
 355 360 365
 Glu Asp Asp Phe Ser Lys Leu Gln Leu Lys Glu Ser Met Ile Pro Ile
 370 375 380
 Thr Arg Ser Leu Gln Lys Ala Leu His His Leu Ser Arg Leu Arg Asp
 385 390 395 400
 Leu Val Asp Asp Thr Asn Gly Glu Arg Ser Pro Lys Met
 405 410

<210> 4350

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4350

Met Gly Gly Lys Leu Ser Asp Ser Arg Lys Asn Leu Cys Lys Gln Ser
 1 5 10 15
 Ser Gln Ser Asp Thr Phe Gly Asp Pro Arg Pro Ala Gly Val Lys Ile
 20 25 30
 Ser Val Asn Pro Leu Lys Cys Leu Leu Gly Val Gly His Thr Leu Pro
 35 40 45

Gly	Pro	Leu	Ala	Cys	Pro	Ala	Leu	Ala	Trp	Pro	Val	Met	Ser	Gly	Ile
50						55					60				
Gln	Gly	Cys	His	Pro	Leu	Pro	Lys	Leu	Ser	Cys	Gly	Val	Pro	Gly	Val
65					70					75					80
Ala	Phe	Pro	Pro	Thr	Val	Pro	Arg	Leu	Pro	Leu	Leu	Ser	Val	Ala	Ala
				85					90					95	
Pro	His	Ser	Gly	Gly	Ile	Met	Ser	Ala	Gly	Glu	Leu	Ser	Leu	Pro	Gln
		100						105					110		
His	Ser	Trp	Pro	Arg	Leu	Trp	Ala	Ser	Ser	Glu	Ile	Ala	Val	Thr	Thr
	115						120					125			
Arg	Pro	Ala	Met	Asp	Ser	Leu									
130						135									

<210> 4351

<211> 205

<212> PRT

<213> Homo sapiens

<400> 4351

Met	Leu	Pro	Ser	Phe	Tyr	Ser	Glu	Leu	Phe	Thr	Leu	Tyr	Leu	Leu	Leu
1				5					10					15	
His	Glu	Arg	Glu	Asp	Ser	Phe	Tyr	Ser	Gln	Gly	Ile	Ala	Asn	Leu	Ser
			20					25					30		
Leu	Phe	Pro	Asp	Thr	Gln	Leu	Leu	Glu	Phe	Leu	Asp	Val	Gln	Lys	His
		35				40					45				
Leu	Trp	Pro	Leu	Lys	Asp	Leu	Thr	Leu	Thr	Ser	Asn	Gln	Arg	Tyr	Ser
50						55				60					
Leu	Val	Arg	Asp	Lys	Cys	Phe	Leu	Ser	Ala	Thr	Glu	Cys	Leu	Gln	Lys
65				70					75					80	
Ile	Met	Thr	Thr	Val	Asp	Pro	Arg	Glu	Lys	Leu	Glu	Val	Leu	Glu	Arg
			85					90					95		
Thr	Tyr	Gly	Glu	Ile	Glu	Gly	Thr	Val	Ser	Arg	Val	Leu	Gly	Arg	Glu
		100				105					110				
Tyr	Lys	Leu	Pro	Met	Asp	Asp	Leu	Leu	Pro	Leu	Leu	Ile	Tyr	Val	Val
	115					120				125					

Ser Arg Ala Arg Trp Gly Ser Gln Gly Pro Glu Lys Gly Gly Ser Gln
 130 135 140
 Pro Gly Cys Trp Gly Ala Arg Gly Arg Val Arg Thr Thr Pro Gln Val
 145 150 155 160
 Ser Ser His Pro Gly Gln Arg Ser Phe Pro Ser Cys Leu Ser Ala Thr
 165 170 175
 Gly Leu Phe Ser Leu Ser Pro Ser Leu Ser Trp Trp Gly Gly Val Leu
 180 185 190
 Gln Asn Ser Ala Pro Gly Ser Arg Asp Pro Pro Asp Pro
 195 200 205

<210> 4352

<211> 416

<212> PRT

<213> Homo sapiens

<400> 4352

Met Ser Pro Ala Met Leu Ser Val Leu Val Lys Met Met Leu Ala Gln
 1 5 10 15
 Ala Gln Glu Ser Val Phe Glu Lys Ile Ser Leu Pro Gly Ile Arg Asn
 20 25 30
 Glu Phe Phe Met Leu Val Lys Val Ala Gln Glu Ala Ala Lys Val Gly
 35 40 45
 Glu Val Tyr Gln Gln Leu His Ala Ala Met Ser Gln Ala Pro Val Lys
 50 55 60
 Glu Asn Ile Pro Tyr Ser Trp Ala Ser Leu Ala Cys Val Lys Ala His
 65 70 75 80
 His Tyr Ala Ala Leu Ala His Tyr Phe Thr Ala Ile Leu Leu Ile Asp
 85 90 95
 His Gln Val Lys Pro Gly Thr Asp Leu Asp His Gln Glu Lys Cys Leu
 100 105 110
 Ser Gln Leu Tyr Asp His Met Pro Glu Gly Leu Thr Pro Leu Ala Thr
 115 120 125
 Leu Lys Asn Asp Gln Gln Arg Arg Gln Leu Gly Lys Ser His Leu Arg
 130 135 140

Arg Ala Met Ala His His Glu Glu Ser Val Arg Glu Ala Ser Leu Cys
 145 150 155 160
 Lys Lys Leu Arg Ser Ile Glu Val Leu Gln Lys Val Leu Cys Ala Ala
 165 170 175
 Gln Glu Arg Ser Arg Leu Thr Tyr Ala Gln His Gln Glu Glu Asp Asp
 180 185 190
 Leu Leu Asn Leu Ile Asp Ala Pro Ser Val Val Ala Lys Thr Glu Gln
 195 200 205
 Glu Val Asp Ile Ile Leu Pro Gln Phe Ser Lys Leu Thr Val Thr Asp
 210 215 220
 Phe Phe Gln Lys Leu Gly Pro Leu Ser Val Phe Ser Ala Asn Lys Arg
 225 230 235 240
 Trp Thr Pro Pro Arg Ser Ile Arg Phe Thr Ala Glu Glu Gly Asp Leu
 245 250 255
 Gly Phe Thr Leu Arg Gly Asn Ala Pro Val Gln Val His Phe Leu Asp
 260 265 270
 Pro Tyr Cys Ser Ala Ser Val Ala Gly Ala Arg Glu Gly Asp Tyr Ile
 275 280 285
 Val Ser Ile Gln Leu Val Asp Cys Lys Trp Leu Thr Leu Ser Glu Val
 290 295 300
 Met Lys Leu Leu Lys Ser Phe Gly Glu Asp Glu Ile Glu Met Lys Val
 305 310 315 320
 Val Ser Leu Leu Asp Ser Thr Ser Ser Met His Asn Lys Ser Ala Thr
 325 330 335
 Tyr Ser Val Gly Met Gln Lys Thr Tyr Ser Met Ile Cys Leu Ala Ile
 340 345 350
 Asp Asp Asp Asp Lys Thr Asp Lys Thr Lys Lys Ile Ser Lys Lys Leu
 355 360 365
 Ser Phe Leu Ser Trp Gly Thr Asn Lys Asn Arg Gln Lys Ser Ala Ser
 370 375 380
 Thr Leu Cys Leu Pro Ser Val Gly Ala Ala Arg Pro Gln Val Lys Lys
 385 390 395 400
 Lys Leu Pro Ser Pro Phe Ser Leu Leu Asn Ser Asp Ser Ser Trp Tyr
 405 410 415

<210> 4353

<211> 296

<212> PRT

<213> Homo sapiens

<400> 4353

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Met Ser Ala Leu Ile Leu Pro Arg Met Lys Gly Pro Arg Leu Thr His
  1             5             10             15
Pro Glu Ser Arg Ala His Gln Ala Leu Pro Gly His Ser Leu Ser Ser
      20             25             30
Ser Ser His Ser Leu Arg Ser Ala Cys Ala Thr Gln Ile Gln Thr Ser
      35             40             45
Arg Thr Trp Glu Val Glu Trp Leu Thr Arg Gly His Pro Leu Glu Glu
      50             55             60
Ala Lys Ala Gly Leu Glu Pro Arg Pro Val Gly Val Gln Val Arg Pro
      65             70             75             80
Leu Pro Ala Ala Gln Cys Pro Leu Ser Ser Ser Ser Leu Gly Thr Leu
      85             90             95
Glu Pro Gln Trp Gly Val Gln Gly Ser Ala Gln Pro Phe Pro Arg Cys
      100            105            110
Val Thr Pro Ser Thr Phe Leu Pro Leu Ser Val Pro Leu Gly Val Ala
      115            120            125
Arg Glu Leu Gly Gly Val Ile Leu His His Glu His Pro Pro Phe Ser
      130            135            140
Pro Ser Ala Glu Lys Ser Val Pro Leu Cys Ile Leu Tyr Glu Lys Tyr
      145            150            155            160
Arg Asp Cys Leu Thr Glu Ser Asn Leu Ile Lys Val Arg Ala Leu Leu
      165            170            175
Val Glu Pro Val Ile Asn Ser Tyr Leu Leu Ala Glu Arg Asp Leu Tyr
      180            185            190
Leu Glu Asn Pro Glu Ile Lys Ile Arg Ile Leu Gly Glu Pro Lys Gln
      195            200            205
Lys Arg Lys Leu Val Ala Glu Val Ser Leu Gln Asn Pro Leu Pro Val
      210            215            220
Ala Leu Glu Gly Cys Thr Phe Thr Val Glu Gly Ala Gly Leu Thr Glu
      225            230            235            240

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Glu Gln Lys Thr Val Glu Ile Pro Asp Pro Val Glu Ala Gly Glu Glu
 245 250 255
 Val Lys Val Arg Met Asp Leu Leu Pro Leu His Met Gly Leu His Lys
 260 265 270
 Leu Val Val Asn Phe Glu Ser Asp Lys Leu Lys Ala Val Lys Gly Phe
 275 280 285
 Arg Asn Val Ile Ile Gly Pro Ala
 290 295

<210> 4354

<211> 130

<212> PRT

<213> Homo sapiens

<400> 4354

Met Ser Ala Leu Ala Val Ser Met Ala Met Val Arg Gly Ser Leu Pro
 1 5 10 15
 Ser Glu Ser Arg Ala Pro Arg Ser Ala Pro Arg Phe Arg Asn Arg Gln
 20 25 30
 Ala Ser Leu Glu Arg Arg Ala Arg Val Ser Arg Pro Pro Asn Phe Ser
 35 40 45
 Gln Pro Ser Ser Pro Cys His His Pro Tyr Pro Val Trp Pro Arg Met
 50 55 60
 Val Ala Trp Cys Ser Gly Pro Arg Pro Ala Leu Ser Ala Trp Phe Thr
 65 70 75 80
 Phe Ala Pro Phe Trp Arg Arg Asn Ser Gln Ala Arg Arg Glu Phe Cys
 85 90 95
 Met Glu Lys Ser Arg Arg Gly Val Glu Gly Gly Ile Pro Ser Gly Gly
 100 105 110
 Phe Gln Asp Val Leu Gly Trp Arg Gln Phe Arg Glu Trp Glu Gly Gly
 115 120 125
 Val Trp
 130

<210> 4355

<211> 213

<212> PRT

<213> Homo sapiens

<400> 4355

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Met Glu Pro Ala Pro Val Ser Ala Pro Thr Arg Ser Pro Cys Ser Pro
  1             5             10             15
Ser Leu Trp Ser Pro Gln Asp Ala Glu Pro Asn Gly Gly Arg Ala Gly
      20             25             30
His Ala Gly Gly Arg Val Ala Leu Ala Ser Gln His Pro Ala Gln Arg
      35             40             45
Lys Pro Leu Leu Arg Gly Arg Pro His Arg Gly Ala Val Gly Pro Asp
      50             55             60
Gly Cys Ala Leu Leu Pro Gln Val Ser Pro Pro Ala Pro Ala Pro Ala
      65             70             75             80
His Ser Ala Asp Ser Ala Pro Arg Ala Thr Gly Ser Ala Pro Trp Thr
      85             90             95
Ala Pro Ala Ala Pro Asn Pro Ala Gly Asp Leu Pro Gly Gly Ser Trp
      100            105            110
Ser Ser Pro Ser His Pro Asp Ala Ser Leu Arg Ser Asn Ser Arg Ala
      115            120            125

Asn Phe Gln Leu Gln Pro Leu Leu Pro Pro Ala Gly Gly Ala Ser His
      130            135            140
Arg Pro Pro Thr Pro Ser Ile Pro Ser Thr His Ser Pro Thr Pro Cys
      145            150            155            160
Gly Ser Leu Gln Lys Arg Pro Gly Arg Leu Cys Pro Pro Ala Pro Pro
      165            170            175
Gly Leu Ser Pro Ser Arg Thr His Leu Ser Ser Arg Thr Leu Phe Pro
      180            185            190
Gly Gly Thr Leu Leu Thr Lys Pro Lys Asp Gln Thr Glu Arg Pro Phe
      195            200            205
Leu Pro Ser Pro Thr
      210

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<210> 4356

<211> 333

<212> PRT

<213> Homo sapiens

<400> 4356

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Met Lys Tyr Arg Ser Cys Ala Asp Cys Val Leu Ala Arg Asp Pro Tyr
 1             5             10            15
Cys Ala Trp Ser Val Asn Thr Ser Arg Cys Val Ala Val Gly Gly His
      20             25             30

Ser Gly Ser Leu Leu Ile Gln His Val Met Thr Ser Asp Thr Ser Gly
      35             40             45
Ile Cys Asn Leu Arg Gly Ser Lys Lys Val Arg Pro Thr Pro Lys Asn
      50             55             60
Ile Thr Val Val Ala Gly Thr Asp Leu Val Leu Pro Cys His Leu Ser
      65             70             75            80
Ser Asn Leu Ala His Ala Arg Trp Thr Phe Gly Gly Arg Asp Leu Pro
      85             90             95
Ala Glu Gln Pro Gly Ser Phe Leu Tyr Asp Ala Arg Leu Gln Ala Leu
      100            105            110
Val Val Met Ala Ala Gln Pro Arg His Ala Gly Ala Tyr His Cys Phe
      115            120            125
Ser Glu Glu Gln Gly Ala Arg Leu Ala Ala Glu Gly Tyr Leu Val Ala
      130            135            140
Val Val Ala Gly Pro Ser Val Thr Leu Glu Ala Arg Ala Pro Leu Glu
      145            150            155            160
Asn Leu Gly Leu Val Trp Leu Ala Val Val Ala Leu Gly Ala Val Cys
      165            170            175
Leu Val Leu Leu Leu Leu Val Leu Ser Leu Arg Arg Arg Leu Arg Glu
      180            185            190
Glu Leu Glu Lys Gly Ala Lys Ala Thr Glu Arg Thr Leu Val Tyr Pro
      195            200            205
Leu Glu Leu Pro Lys Glu Pro Thr Ser Pro Pro Phe Arg Pro Cys Pro
      210            215            220

```

Glu Pro Asp Glu Lys Leu Trp Asp Pro Val Gly Tyr Tyr Tyr Ser Asp
 225 230 235 240
 Gly Ser Leu Lys Ile Val Pro Gly His Ala Arg Cys Gln Pro Gly Gly
 245 250 255
 Gly Pro Pro Ser Pro Pro Pro Gly Ile Pro Gly Gln Pro Leu Pro Ser
 260 265 270
 Pro Thr Arg Leu His Leu Gly Gly Gly Arg Asn Ser Asn Ala Asn Gly
 275 280 285
 Tyr Val Arg Leu Gln Leu Gly Gly Glu Asp Arg Gly Gly Leu Gly His
 290 295 300
 Pro Leu Pro Glu Leu Ala Asp Glu Leu Arg Arg Lys Leu Gln Gln Arg
 305 310 315 320
 Gln Pro Leu Pro Asp Ser Asn Pro Glu Glu Ser Ser Val
 325 330

<210> 4357

<211> 180

<212> PRT

<213> Homo sapiens

<400> 4357

Met Leu Glu Gly Val Ser Asn Glu Phe Asp His Phe Gly Ile Ser Leu
 1 5 10 15
 Pro Leu Lys Ile Cys Leu His Leu Gly Trp Asp Glu Gly Leu Val Glu
 20 25 30
 Gly Lys Val Val Arg Leu Gly Gln Gly Ile Gly Lys Ser Ile Cys Ser
 35 40 45
 Ser Cys Gln Leu Phe Glu Glu Ala Pro Thr Gln Met Ser Thr Val Pro
 50 55 60
 Ser Gly Leu Pro Leu Pro Ile Leu Met His Leu Cys Leu Leu Pro Val
 65 70 75 80
 Cys Met Ala His Leu Cys Pro Ala Ser Pro Cys Tyr Phe Gly Ala Thr
 85 90 95
 Pro Gly Ser Gly Lys Phe Cys Arg Leu Ile Thr Tyr Ser His Ser Ser
 100 105 110

Pro Gln Leu Ala Ala Ser Leu Arg His Arg Gly Arg Glu Val Gly Lys
 115 120 125
 Asp Leu Pro Tyr Pro Gly Leu Cys Pro Leu Thr Phe His Pro Ser Phe
 130 135 140
 Phe Pro Pro Val Glu Gly Cys Val Ser Ser Leu Pro Gly Lys Leu Leu
 145 150 155 160
 Ser Pro Gln Thr Ile Phe Phe Gln Ile Leu Trp Leu Tyr Ser Lys Ser
 165 170 175
 Ser Leu Val Leu
 180

<210> 4358

<211> 1222

<212> PRT

<213> Homo sapiens

<400> 4358

Met Leu Asp Pro Ser Ser Ser Glu Glu Glu Ser Asp Glu Gly Leu Glu
 1 5 10 15
 Glu Glu Ser Arg Asp Val Leu Val Ala Ala Gly Ser Ser Gln Arg Ala
 20 25 30
 Pro Pro Ala Pro Thr Arg Glu Gly Gln Leu Asp Asp Glu Gln Glu Arg
 35 40 45
 Arg Ile Arg Leu Gln Leu Tyr Val Phe Val Val Arg Cys Ile Ala Tyr
 50 55 60
 Pro Phe Asn Ala Lys Gln Pro Thr Asp Met Ala Arg Arg Gln Gln Lys
 65 70 75 80
 Leu Asn Lys Gln Gln Leu Gln Leu Leu Lys Glu Arg Phe Gln Ala Phe
 85 90 95
 Leu Asn Gly Glu Thr Gln Ile Val Ala Asp Glu Ala Phe Cys Asn Ala
 100 105 110
 Val Arg Ser Tyr Tyr Glu Val Phe Leu Lys Ser Asp Arg Val Ala Arg
 115 120 125
 Met Val Gln Ser Gly Gly Cys Ser Ala Asn Asp Phe Arg Glu Val Phe
 130 135 140

Lys Lys Asn Ile Glu Lys Arg Val Arg Ser Leu Pro Glu Ile Asp Gly
 145 150 155 160
 Leu Ser Lys Glu Thr Val Leu Ser Ser Trp Ile Ala Lys Tyr Asp Ala
 165 170 175
 Ile Tyr Arg Gly Glu Glu Asp Leu Cys Lys Gln Pro Asn Arg Met Ala
 180 185 190
 Leu Ser Ala Val Ser Glu Leu Ile Leu Ser Lys Glu Gln Leu Tyr Glu
 195 200 205
 Met Phe Gln Gln Ile Leu Gly Ile Lys Lys Leu Glu His Gln Leu Leu
 210 215 220
 Tyr Asn Ala Cys Gln Leu Asp Asn Ala Asp Glu Gln Ala Ala Gln Ile
 225 230 235 240
 Arg Arg Glu Leu Asp Gly Arg Leu Gln Leu Ala Asp Lys Met Ala Lys
 245 250 255
 Glu Arg Lys Phe Pro Lys Phe Ile Ala Lys Asp Met Glu Asn Met Tyr
 260 265 270
 Ile Glu Glu Leu Arg Ser Ser Val Asn Leu Leu Met Ala Asn Leu Glu
 275 280 285
 Ser Leu Pro Val Ser Lys Gly Gly Pro Glu Phe Lys Leu Gln Lys Leu
 290 295 300
 Lys Arg Ser Gln Asn Ser Ala Phe Leu Asp Ile Gly Asp Glu Asn Glu
 305 310 315 320
 Ile Gln Leu Ser Lys Ser Asp Val Val Leu Ser Phe Thr Leu Glu Ile
 325 330 335
 Val Ile Met Glu Val Gln Gly Leu Lys Ser Val Ala Pro Asn Arg Ile
 340 345 350
 Val Tyr Cys Thr Met Glu Val Glu Gly Glu Lys Leu Gln Thr Asp Gln
 355 360 365
 Ala Glu Ala Ser Arg Pro Gln Trp Gly Thr Gln Gly Asp Phe Thr Thr
 370 375 380
 Thr His Pro Arg Pro Val Val Lys Val Lys Leu Phe Thr Glu Ser Thr
 385 390 395 400
 Gly Val Leu Ala Leu Glu Asp Lys Glu Leu Gly Arg Val Ile Leu Tyr
 405 410 415
 Pro Thr Ser Asn Ser Ser Lys Ser Ala Glu Leu His Arg Met Val Val
 420 425 430